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LECTURE

ON THE

LAWS WHICH GOVERN

THE

MODE AND RATE OF DECAY

IN

THE HUMAN FRAME.

DELIVERED AT ST. THOMAS'S HOSPITAL, ON WEDNESDAY, MARCH 22, 1843.

BY

GEORGE GREGORY, M.D.,
Physician to the Small-pox Hospital.

Subject proposed. Of natural decay. Hardening process, or ossification. Death by bronchial calculus. Ossification of arteries. Death by coma. Death by bronchitis senilis. Degeneration of animal tissues. Death by exhaustion. Phenomenon of Growth. Turn of Life. Of premature decay. Office of the lungs. Pulmonary decay, or consumption; its prevalence in all climates. Effect of occupation on the rate of pulmonary decay. Decay by acute disease, or unseen violence. Of miasms; their variety; gradual extinction of old and introduction of new miasms. Theory of zymosis. Diseases of internal origin. Relative decay of the sexes. Effects of occupation on decay. Rapid decay in military life. Gradual improvement in the value of human life. Conclusion.

If this were a pulpit instead of a rostrum, if, in place of being a physician addressing a mixed assemblage of professional and unprofessional persons, I were a bishop or curate addressing a congregation, I should have no difficulty in fixing upon an appropriate text. The third chapter of Genesis, verse 19, would supply me with a most apt one, where we read, that not very long after man's creation the decree went forth, that whereas "from out of the dust he arose, so unto the dust he should return." When this fiat, so pregnant with consequences to the whole human race, was issued, certain laws were at the same time established which should govern the *mode* of decay of the human frame, and regulate the *rate* at which such decay should take place.

To determine those laws has been a continual object of pursuit with the professors of medical science from the earliest periods. The physiologist, availing himself of the knowledge which his researches into *life* afford, has traced the sources of decay, and explained the direct causes of death. The physician, carrying this knowledge into the streets and highways of life, has laboured assiduously (the lancet in one hand and quinine in the other) to arrest decay, when hurrying forward with a too fatal precipitancy. Dragging from their secret recesses in the vegetable and mineral world the powerful aid of mercury, of steel, and of iodine, he has also striven (with a skill which deserved success even when he could not command it) to control and check that slower process which, by a different route, lands us at last at the Kensall-green terminus!

"Sedem properamus ad unam!"

Where neither the one nor the other of these offices has been open to him, his care has been to smooth the downward path of life, and, with poppy, mandragora, and other drowsy syrups, to lessen that bodily suffering, the ghastly spasm and the racking torture, which, under certain circumstances, presently to be noticed, decay bears in its train.

The decay of the human frame, which has thus practically been the object of the physician's solicitude from the days of Hippocrates downwards, has been studied, however, more in parts than as a whole. Few have attempted to give a general view of the subject,—to connect all the varieties in the modes of human decay, and supplying that link which binds them together, to show that here, too, Nature operates by fixed laws. To remedy this deficiency (if, indeed, the deficiency exists), to arrange and generalise the opinions concerning the decay of the human frame, which separately are so familiar to us all, and to bring to the aid of our judgment in this matter the faithful and impartial results of statistical inquiry,—these are the objects of the present lecture.

A little reflection on the several modes by which mankind are removed from the world will suffice to show that they admit of being arranged into four classes, namely,—1, Natural decay; 2, Premature decay, of a slow or chronic kind; 3, Rapid decay, by acute disease and unseen violence; 4, Rapid decay (or destruction of the body) by open violence. The first three of these topics will furnish us with abundant food for reflection. I begin with natural decay.

The first question which will occur to any one engaging in the inquiry is, How is natural decay effected? What is the process by which Nature provides for the gradual extinction of life within us, when a constitution naturally sound, which eighty returning years have found and left in the enjoyment of health, at length approaches its natural close? The answer is, that Nature effects her object by a process of hardening of the structures.

The disposition in the tissues of the human body to harden is displayed in a variety of ways. The earliest ever witnessed is the tendency to deposit sand and gravel in the kidney, which, by successive depositions, advance in time to the dignity of stone. This, which is so very common in old age, is occasionally witnessed in the child. The same tendency is displayed in other persons by the formation of biliary calculi, or gallstones. Very soon after puberty we see in some constitutions a disposition to deposit bony matter about the roots of the lungs. These deposits, called bronchial calculi, are sometimes expectorated, but they may, *per se*, become the direct cause of death. In November last the quarter-master of her Majesty's 8th regiment of Foot, stationed in Dublin, died of bronchial calculus. It had formed in the triangular space below and between the bifurcation of the bronchi. An abscess followed, having fistulous communication with the bronchi and with the œsophagus. One morning the calculus slipped into one of the fistulous openings into the bronchi, and life was suddenly extinguished.

With reference to the decay of the frame, the most important hardening is that of the apparatus for the circulation of the blood, for pliancy is essential to the functions of the arteries. Other parts may stiffen and become rigid, and no other result follow than local inconvenience, but arteries must be adapted to the varying momentum of the blood, to those changes in the circulation which are the necessary consequences of exercise, of mental emotion, of the indulgence of our appetites.

The first inroads on the normal condition of the arteries are made by the deposition of atheromatous points, at first scattered over the surface of the arterial system, but soon congregating in patches of cartilaginous hardness in those vessels which have most work to do, viz., in the large artery issuing from the heart (the aorta), and its three earliest branches. To these atheromata succeed spicula of bone, which shoot up here and there like crystals, and at length unite into masses. As life advances, this ossific process creeps into the most distant branches of the arterial system.

The arteries of the brain are those which in a perfectly normal state, with no disturbing forces whatever (no hereditary predisposition, no exposure to cold, no weakness left as the legacy of a departed ailment), first yield; for they are the *finest* and the most exquisitely organised, and therefore the most carefully packed of all the vessels of the body. Some artery of the brain gives way, and blood is effused upon its delicate structure. Apoplexy, therefore, is the most perfectly natural—is the very *beau ideal*—of all the modes of vital decay. How splendid a picture does this present of the unbounded love and tenderness of the Creator towards his creatures! The body must perish, but in the truly normal mode of decay death is effected by a process which, in one instant, destroys all sensation and all consciousness!

Allow me to read to you a sketch of the decay of the human frame under the very circumstances now supposed, drawn by a female hand, but by no unskilful one.

A lady at Bath (a relation of my own), one of a family remarkable for longevity, had reached the age of eighty-nine! weak in body, but in perfect possession of all her faculties. On Monday, February 6, 1843, just six weeks ago, she was sitting on a sofa, talking to an old nurse, who had called to visit her, in the enjoyment of her usual health, when suddenly she bent forward without groan or sigh. From that moment consciousness and sensation ceased. She was bled and leeched, and all the appliances of human skill were ably directed, but she never revived. "The body," writes my fair correspondent, "remains motionless. No food is taken. The sound of breathing alone gives sign of life; the lungs act; the pulse beats; and the body, Mr. Stockwell tells us, is living on itself. For seven long days has this lasted. We feel that our relative has been dead for a week! We have her body, it is true, but it is only her body that remains with us—*warm*, instead of *cold!*"

Such is the perfectly normal or natural mode of decay of the human frame. In all such cases the lamp of life is not extinguished. It burns down to the socket, and in the most wonderful manner extinguishes itself. The spectacle is full of interest to all; for it proves that the decay of the frame and the ultimate extinction of life, are regulated by the same consummate skill which presides at the birth, and which moulds into symmetry the growth of the body.

Other modes of death there are, all, like apoplexy, referrible to the hardening pro-

cess. Among these I may mention as the most frequent palsy, aneurism, angina pectoris, and dropsy. Palsy is only a minor degree of apoplexy. In angina pectoris the process of decay is slow and accompanied with severe suffering. The heart itself is slowly converting into bone. As if to make amends, Nature has ordained that the extinction of life should here be instantaneous and painless.

A few cases of aneurism arise from accidental causes rupturing the vessel, and this disease, therefore, may show itself in early life, but, for the most part, aneurism is the consequence of the ossific process, and a form of natural decay. The blood insinuates itself by the side of some minute spicula of bone, and gradually distends the coats of the artery.

The deposit of osseous matter in the *interior of the heart*, especially about the valves of the aorta, is an exceedingly common mode of natural decay. The immediate effect of it is to prevent that free and equable distribution of the blood which is essential to health and life, and ultimately to bring on dropsy. Dropsy, therefore, is another of the modes of natural decay.

Another provision of Nature for the extinction of life at advanced ages, differing equally from the impairment of the brain and of the heart, is to be found in *interruption to the respiration*. Air is as necessary to man's life as the blood, or the nervous influence. Now, in many cases of purely natural decay, the air-passages are made the medium of extinguishing life. Fluid effusion takes place from them by an action which originates within the body, and though of an inflammatory kind is wholly independent of cold. Bronchitis, then, is a third mode of natural decay, and it is that which Nature most generally sets up, when either extreme debility, or the gradual disorganisation of other structures, has at length reached that point which is incompatible with life.

Signor Ferrari, formerly well known and esteemed as a director and musical composer to the Italian Opera in London, had reached the age of eighty-one. Life for him had lost its charms; the sight of both his eyes was gone; his body was greatly enfeebled and emaciated; rheumatic pain racked his limbs; his appetite began to fail; he had learned but too forcibly

"That life protracted is protracted woe."

The few friends who survived could perceive that his end was approaching, but how that was to be effected was a mystery, for his pulse was good and his intellect clear. Early in November, 1842, he began to complain of cough; this increased upon him. On the 24th of November I first saw him. He was then expectorating an abundant puriform mucus; his debility augmented daily. From that date he never left his bed. Early in the morning of the 30th of November, incipient delirium betokened the circulation of venous blood through the brain. At six, p.m., of that day he calmly expired.

This destructive process, spontaneous bronchial inflammation, commonly called bronchitis senilis, is often, I have said, set up in the advanced stages of the disorganisations (or *degenerations*, as they are called,) of the animal tissues. To the consideration of these I next proceed.

In this mode of decay the several structures of the body do not simply harden; their nutrient vessels take on certain diseased actions; healthy structure gives place to morbid structure, which in process of time becomes incompatible with life. There are an immense variety of these chronic degenerations. Foremost in the scale stands the cancerous degeneration, where a malignant mode of action is set up, accompanied generally with excessive pain. It commences in one tissue and gradually extends to a second and a third,

"Till pitying Nature signs the last release,
And bids afflicted worth retire to peace."

The deaths by cancer throughout England and Wales average 2700 per annum; and it appears that about eighteen die annually by this disease for every 100,000 of the population.

Closely associated with the cancerous degeneration are those called fungus hæmatodes, medullary sarcoma, and melanoid tumour. Another series of disorganisations are the tubercular, the most perfect specimen of which is the large white tubercle of the liver.

A lady, unmarried, the sister of one now standing before me, about forty-five years of age, had passed blood on several occasions, but soon recovered. In the spring of 1839 this symptom returned with more than its wonted severity, followed by indigestion, flatulence, and a sallow aspect of countenance. To these symptoms succeeded great bodily weakness and emaciation; then followed, by slow degrees, excessive viscidity of the saliva, total sleeplessness, frequent syncope, aphthæ, and at length deep jaundice.

I mention this case because it gives me an opportunity of explaining to you what happens when Nature, generally so indulgent, fails to set up that bronchial inflammation just adverted to. Death must then be effected by the mode of "*exhaustion*," the senses remaining entire and the breathing unimpaired, until the last drop of blood in the body has been *used up*. So long as wine and brandy could be forced down, so long did the flickering taper of life in this estimable lady continue to burn. But the time at length arrived when, in consequence of the aphthous state of the mouth, the act of

swallowing gave such exquisite pain that all support was necessarily abandoned.

Death by exhaustion is truly terrific. For many days the lady prayed fervently to be released from the wretched feeling of a heart acting till there was no blood left for it to act upon.

With what force and truth does Milton describe this mode of decay:—

> "For over them triumphant Death his dart
> Shook, but delay'd to strike, tho' oft invoked
> With vows, as their chief good and final hope!
> Sight so deform what heart of rock could long
> Dry eyed behold?"

This case is a good paradigma of structural degeneration taking place at its most usual period of life. There are many others of a like kind of much more frequent occurrence. One of the most remarkable is granular kidney, a form of vital decay which has been studied with such care and success by the physician of a neighbouring hospital, that in imitation of the good old custom which dictated such names as the Eustachian tube, the circle of Willis, or the capsule of Glisson, it has been called "*Bright's kidney.*" It is often the precursor of dropsy, and the chief cognisable evidence of what the world calls a "*break up of the frame.*" To this form of disorganisation and decay I may add scirrhus of the stomach, scirrhus of the rectum, tumours attached to the peritoneum and uterus, hypertrophy and soft vegetations about the heart. In this latter case the struggle towards the close of life is often fearful, the mode of death being sufficient of itself to characterise the disease.

Heart affections are certainly on the increase in this country. The deaths from this cause throughout England and Wales amount now to *four thousand* annually.

Disorganisation of the pancreas appears to be the *rarest* form of chronic decay. Not more than twenty-five persons die of it annually in England. The advanced stages of this disorder are attended with great distress, with delirium, convulsions, and other evidences of nervous sympathy. We cannot here say *facilis descensus Averni.*"

In all the cases now adverted to decay is traceable to the branches of the aorta, to those vessels which for the first twenty years of life are incessantly occupied in that truly wonderful process "*growth,*" a phenomenon which, from its extreme familiarity, ceases to be the object of our astonishment; yet which, when duly considered, is nothing less than a daily miracle, pointing out to us the immeasurable distance interposed between divine power and the utmost efforts of human skill. Splendid as the steam-engine is, teeming as it does with the elements of of power, a monument of man's ingenuity, yet *as* it issues from the manufactory so it must for ever remain. The combined genius of a Watt, a Bolton, and a Maudslay, could never make even the most distant approach to that simple phenomenon *growth,* which every child daily displays.

From the twentieth year of life, when growth ceases, the action of these nutrient vessels begins to change. Sometimes it subsides quietly, and the system is left in possession of its completed strength for another period of twenty years; but frequently, too, it happens that from having been so long occupied, this, their normal subsidence, does not take place. The capillary vessels refuse to be idle; mischief of some kind must then inevitably follow; either a process of hypertrophy commences, or it may be of degeneration, and thus is the foundation laid for decay of the frame. In persons of weak or scrofulous habit the healthy process of growth, and one or other of these morbid abnormal processes, may chance to proceed simultaneously.

At length, even to the strongest, comes the age of forty, when the top step of the ladder is reached, and the "*turn of life*" takes place; then it is that the degenerating actions chiefly prevail, and *they* constitute (from this period to the age of sixty) the chief modes of human decay.

Time, then, the great destroyer of all things, is the main agent employed by nature in working out the decay of the frame, but several other circumstances contribute to the result. Of these by far the most important is "*hereditary predisposition,*" which exists not only to such general modes of disease and decay as *gout, gravel, rheumatism,* and *cancer,* but even to the disorganisation of particular viscera. Scirrhus of the stomach, which, at the age of fifty-two, brought to a close the splendid but checquered career of Napoleon Buonaparte, was hereditary in his family. Affections of the heart may often be traced to the same source.

Again, intemperance is one of those accessory causes which, lighting up diseased actions, pave the way to many kinds of disorganisation, especially those of the liver. Occupation, also, has its share of influence. Chimney-sweepers are liable to scrotal cancer; painters to palsy.

The proportion which deaths by natural decay bear to the total mortality cannot be made out with strict accuracy, but we shall be near the truth in stating that there die, per 1000, of old age, debility, and the disorders depending simply on age, about 175; by the disorganising or chronic morbid processes *accompanying the advance of life,* 225; total by this mode of decay, 400 per 1000.

I must now withdraw your regards from the several varieties of slow but natural decay, to fix them on the equally important, I was almost tempted to say the still more interesting, subject of slow but *premature* decay.

With very different feelings do we view the departure of the veteran who full of years and honours

> Superfluous lags upon the busy stage
> Where newer forms and different views engage;

and the early exit of ripening beauty or aspiring genius.

It happens to but a small portion of mankind to be gathered to their fathers, like the Patriarchs of old (after completing the full term of human existence), by a slow and "unperceived" decay. The larger proportion of mankind perish either by some acute malady cutting life short, or by the mode of decay now to be described.

Those who are in the least conversant with the structure of the body must know that the heart is a double organ; but all present may *not* know that the two portions of the heart have distinct offices. The left heart is engaged in the great work of growth, and in the repair of injuries, and in those exceedingly useful processes, digestion and secretion, without which life would soon come to a stand-still; the other, the right heart, placed, for convenience of stowage, in the same bag with the other, has a totally different function; it is the mere workshop of the other, the laboratory from which the left heart draws its hourly decreasing supplies. Now, with this difference of function is associated a remarkable difference with reference to decay. The vessels of each system are governed in this respect by different laws; those of the right heart take on the process of decay at a date much anterior to that when the aortic system of vessels gives way. With reference to aortic decay, we, therefore, call pulmonary decay *premature*, not that it really is so, any more than aortic decay can legitimately be called *protracted*.

I know no reason why the lungs, and the peculiar apparatus of vessels belonging to them, should be liable to an earlier decay than parts supplied by the aorta; it is a *law* of the animal economy,—a principle interwoven in the construction of our frame. I believe that no reasoning will ever carry us beyond the simple fact that pulmonary decay precedes systemic decay, doubtless for some wise and necessary purpose.

Pulmonary decay is, of course, what the world calls "consumption;" it occurs at all periods of life. Mr. Farr, in his third report, has given a table showing the prevalence of consumption in three of the most populous towns of England at all ages from birth to decrepitude. I will take Liverpool as an example.

There died of consumption at Liverpool in 1839, 1124 persons, of them there were

Under the age of 5 years..	227	(¼ of whole)
Between 5 and 15	194	
„ „ 15 and 30	379	(⅓ of whole)
„ „ 30 and 50	258	
Upwards of 50 years of age	66	
Total.....	1124	

You see that consumption is diffused through all ages of human existence, but not equally; that it is most frequent at that period of life when the growth of the body is completed (that is, between 15 and 30), and least common in advanced years.

Consumption is an hereditary ailment, but it appears also in families who have shown no such tendency. A single member of a family sometimes dies consumptive. Delicate texture of the lung is the root of the evil, but habits of intemperance may break down a structure of lungs originally the soundest.

Consumption is immeasurably at the head of all the fatal diseases of the human body; no single malady approaches even near it. Scarcely less remarkable than its frequency is the steadiness of the mortality which it occasions, bespeaking, as it undoubtedly does, some peculiarity of cause.

There died of consumption throughout England and Wales in 1838, 59,025 persons; in 1839, 59,559 persons; in 1840, 59,923 persons, while the total mortality varied from 342,519 to 359,561.

In the metropolis, during the five years from 1838 to 1842 inclusive, the deaths by consumption have been as follows:—7687 7104, 7236, 7326, 7145; while the total mortality varied from 45,272 to 52,698.

No other disease exhibits an uniformity at all approaching to this.

Females are the especial victims of consumption. In the three years, 1838, 1839 and 1840, there died, throughout England and Wales, 80,560 males; 90,711 females; that is, 9 females to 8 males.

Compared to the total mortality, the average deaths by consumption are 170 per 1000. This you will remember is very nearly what we calculated the deaths by old age, debility, and its associated disorders to be; in other words, rather more than 1 out of every 6 deaths that occur in England is imputable to consumption, and one to old age and its consequences; one to premature decay; one to natural decay: such is the law of nature.

Among the many remarkable facts which recent statistics have brought to light, is the prevalence of consumption in all parts of the world, the hottest as well as the coldest. Year after year has seen consumptive patients expatriating themselves to profit by the supposed immunity which tropical countries enjoy from the ravages of pulmonic decay! Vain delusion! We learn from the statistical reports of the British army that *twice* as many cases of consumption originate in Jamaica, as at home, among European soldiers. Out of 51,000 troops serving in that island in the course of twenty years (1817 to 1836), there were attacked by consumption 661, or 13 per 1000; whereas ut of 44,000 troops quartered in England during the same period, 286 only were attacked,

which is 6 per 1000. The same fact was ascertained with regard to the East Indies. Consumption is twice as prevalent at the Mauritius as at the Cape of Good Hope, although pneumonia and other diseases of the lungs are considerably more abundant in the latter colony.

This fact (the increased prevalence of consumption among Europeans proceeding to hot countries) has lately received a striking illustration. The lower orders of animals, it is well known, are equally with man liable to pulmonary decay, more especially those of the monkey and cat tribe. Mr. Miller, the intelligent superintendent of the Zoological Gardens, informs me that until lately in that establishment, *one-half* of the deaths in those orders of animals has been from consumption, the disease commencing prior to the animal's attaining its full growth. The great extent of this mortality suggested the idea that it might be owing to some mismanagement, and this he believes to be the high temperature of the air breathed. By reducing this from 60° and upwards to 50°, the health of the animals has of late materially improved. Visitors to the gardens may have noticed that some of the finest and healthiest leopards and tigresses have passed the last winter, without any artificial warmth, in the open garden, and that the temperature of the monkey-house very little exceeds 50°.

From very early periods a tendency to develop consumption has been associated with particular trades. Those of glass-blowing, scythe-making, and leather-dressing, have been denounced as especially injurious to the lungs. Statistics are calculated to clear up this point, because, if true, the proportion of male deaths by consumption, *in towns where those trades are practised*, ought to exceed the female deaths. Mr. Farr has kindly supplied me with data to test the correctness of this notion. From these tables we learn, first, that the male deaths in the four towns of *Birmingham*, *Sheffield*, *Worcester*, and *Newcastle*, exceed the female deaths in the proportion of 23 to 20; whereas in the three agricultural counties of Essex, Suffolk, and Norfolk, the female deaths by consumption are to the male deaths as 67 to 52.

TABLE exhibiting the Comparative Prevalence of Consumption in the Sexes in Towns and Country Districts.

Locality.	1841.		Deaths by Consumption.	
	Males Living.	Females Living.	Males.	Females.
Birmingham, Sheffield, Newcastle, and Worcester	157,430	165,755	2357	2049
Essex, Suffolk, and Norfolk	509,496	531,182	5243	6740

Again, by comparing the deaths with the numbers living, you will perceive that the male deaths by consumption in the four towns are to the total male population in those towns as 16 to 1000; while in the three agricultural counties the proportion is as 10 to 1000, the ratio of female deaths to the female population *being the same in town and country*, namely, 13 per 1000. The popular notion, therefore, is thus proved to be well founded.

A survey of all the facts connected with the origin and development of consumption confirms the great principle that this disorder is not (as some would have us believe) a modification of *common* inflammation, but that it is a true decay of the pulmonary apparatus, originating from very recondite and perhaps unappreciable causes. Sir James Clark, one of the latest and most acute writers on consumption, has introduced the term tuberculous cachexia, to express, with as much precision as the nature of the subject will at present allow, that condition of the body which tends to pulmonary decay.

Changes have taken place in the relative position of all other diseases by which mankind is removed from the world; they, like kingdoms, have their rise and fall, but consumption holds the same place in the catalogue of mortal maladies which it occupied in the infancy of statistical science, and probably in the earliest ages of the world.

Decay of the respiratory apparatus, therefore, must be viewed as the great gulph into which all improvements in medical science, and all ameliorations in the physical condition of man tend ultimately to drive the population. Any measure which, like vaccination, or improved nursing, or the use of flannel, lessens the amount of mortality in early life, carries the junior population forward to the epoch when it becomes obnoxious to pulmonary decay. The progress of systemic decay may be checked by art, and thus may the value of human life be improved, but no statistical considerations warrant the conclusion that we possess any such controling power over the course of pulmonary consumption.

The third mode of decay of the human frame I described as "*rapid decay by acute disease or unseen violence.*" The human body is not invaded by such external agents alone as are cognisable to our senses, such as arsenic, sulphuric acid, the bite of a mad dog, or a locomotive engine, but by various agents of a less palpable character, whose effects are not the less remarkable. We distinguish these hidden sources of disease by the term "*miasms, or morbid poisons.*" They steal insensibly into the system, and there effect ravages, sometimes so frightful as in a few hours to deprive the strongest man of all power, and even of *life* itself; others operate by a slower process, but with a result not the less certain or fatal. To the first class of morbid poisons belong cholera Asiatica, Egyptian plague, and the angina maligna, or putrid sore throat. To the second class belong small-pox, measles, hooping-cough, remittent fever, and typhus fever; besides which there are a variety of other morbid poisons which are less destructive in their effects, but which, nevertheless, prove occasionally the sources of death. Of this kind are erysipelas, syphilis, ague, and influenza.

These miasms, or poisons, are of two kinds, those of animal and those of terrestrial origin. Small-pox, hydrophobia, measles, scarlatina, and cow-pox, are miasms originating from the animal body in a state of disease, and therefore called the *morbid animal poisons.* Again, ague and remittent fever, probably also dysentery and beriberi, and, perhaps, cholera, are the results of noxious miasms generated on the earth's surface by the decomposition of *vegetable* matter. These are distinguished as the diseases of endemic, paludal, or *malarial* origin. Each miasm, whether springing from an animal or an earthy source, has its peculiar mode of development; some affect the skin, some the bowels, some the blood. Whatever the mode be, it is the same, whether the poison invades the European or the Negro, the young or the aged, the strong or the weak. They all agree in their mode of imbibition. They correspond in the theory of their action. They are all, in short, pathologically associated, and whether designated as epidemic, endemic, or contagious maladies, they are to be looked upon as *agents interrupting the normal course of man's life in his progress to natural decay.* They chiefly prevail in the periods of infancy and manhood.

There are strong reasons to believe that in an earlier period of the world diseases of a miasmatic nature existed, which have since disappeared, while others have supplied their place.

The plague described by Thucidydes as having devastated Athens during the Peloponesian war (429 years before Christ), does not correspond with any known disorder, although it bears a general resemblance to scarlet fever. The same may be said of the plague described by Procopius as invading Constantinople and the neighbouring countries in the year 544 after Christ. Many pestilences which prevailed during the dark ages, and which are described by the physician-monks of those days, cannot be recognised as the diseases of modern times. There are the strongest grounds for believing that small-pox did not commence its ravages until the year 622. If we may credit Constantine Africanus, measles first showed itself about the year 900 of the Christian era. Syphilis first appeared in 1598. The first accurate accounts which we have of the scarlet fever are in the year 1610, when that disorder invaded Spain. It was unknown in Edinburgh until 1680, for Sir Robert Sibbald, physician to King Charles the Second in Scotland, writing in that year, says of it, "That it was so recently introduced, and so little understood, that he would not venture any observations either on its theory or treatment." Scarlet fever did not invade America until 1735. Neither small-pox or measles have yet reached our Australian colonies. Two years only have elapsed since scarlet fever assailed them. Horace says that, in days long past,

"Nova febrium
Terris incubuit cohors."

That this should have happened need not surprise us.

We have in our own days seen two new miasms spring into existence. In 1798 Jenner made us acquainted with cow-pox. In 1817 cholera arose, like a black vapour, from out the Sunderbunds of Bengal, and has since carried death and desolation through every known country of the world, except those highly-favoured regions to which England, with a generous humanity, consigns the victims of crime, Australia and Van Dieman's Land.

It will, in after times, be noticed as a strange coincidence that thus, within twenty years of each other, cow-pox and cholera, the mildest and the most malignant of human maladies, the alpha and the omega of the morbid poisons, should have originated. Whether this was accident, or whether, among the many inscrutable arrangements of Providence, cholera was ordained to be the scourge of mankind when small-pox declined, as small-pox arose when earlier plagues had been banished, it is not for us to say. Reflecting, however, upon the origin and succession of epidemic maladies, it is impossible, I think, not to trace in them evidences of *design.* We may even venture so far into the regions of conjecture as to predict that Nature has not yet exhausted her catalogue of epidemic

"And wide wasting pestilences."

There probably are others of "*the painful family of death*" still in the womb of time, to

occupy the thoughts of physicians yet unborn, and to assume hereafter their station among

> "The miseries which the inabstinence of Eve
> Hath brought on man."

The several miasms now adverted to operate on the animal economy by a principle very analogous to that which, in the vegetable world, is called *fermentation*. This is no new doctrine, though as recently revived by the ingenious Liebig, who has invested this hypothesis with a strictly scientific character, it has all the charms of freshness. It is, in fact, one of the oldest doctrines in physic, and very striking is it thus to witness the revolutions of the wheel of science!

Mr. Farr, to whose indefatigable labours every physician pays a willing tribute of praise, has done good service to pathology by substituting the term *zymosis* (derived from the Greek Ζυμοω to ferment) to express the mode by which the several morbid poisons operate on the *animal* economy. Zymotic diseases, therefore, will include all those which have hitherto been known by the name of *epidemic*, *endemic*, and *contagious* maladies. A change of phraseology was called for by the new aspect of science, and the term has been judiciously selected.

The destruction of human life by the zymotic tribe of diseases is very great. Upon an average of years, 350,000 persons die annually in England and Wales, of whom 70,000 are the victims of epidemic and contagious diseases, that is, 1-5th of the whole. The equalisation of epidemic mortality through a succession of years is very remarkable. Every year is distinguished by some prevailing, reigning, or *master* epidemic, during the continuance of which other epidemics decline. Thus, in 1838, small-pox was in the ascendant, and 16,268 persons died of it throughout England and Wales. In 1839 measles predominated, and destroyed nearly 11,100 persons.

In 1840 scarlet fever was so general and so fatal throughout England that it destroyed more lives by 1-5th than small-pox did during its epidemic season. The deaths by scarlet fever in that year were nearly 20,000. The exact numbers were 19,816. Knowing (as we do) the average rate at which scarlet fever proves fatal (six per cent), we are sure that in the year 1840, there could not have been less than 360,000 cases of scarlet fever in England and Wales! Measles, hooping-cough, small-pox, however, declined. Everything teaches us that when one avenue to death is closed, another opens, for "*noctes atque dies patet atri janua ditis.*" If children are saved from small-pox, therefore, it is only to fall into the power of tyrants, scarcely, if at all, less inexorable.

TABLE exhibiting the amount of Exanthematic Mortality in England and Wales, during the years 1838, 1839, 1840.

	Year 1838.	Year 1839.	Year 1840.
Small-pox	16,268	9131	10,434
Measles	6514	10,937	9326
Scarlet fever	5802	10,325	19,816
Total mortality by the Exanthemata	28,584	30,393	39,576
Total mortality throughout England and Wales	342,529	338,979	359,561

Besides the zymoses, the human body is subject to the assaults of many acute diseases of internal origin, which the old writers (probably with reason) attributed to a faulty condition of the blood and humours. They are naturally associated with the zymoses, not only from a like obscurity of origin, but because they occur at the same periods of life, run the same rapid course, and equally with them serve as interruptions to natural decay. The forms which they principally assume are, rheumatic fever, gout, pneumonia, hydrocephalus, and convulsion. They may be either of an inflammatory or congestive character. The ordinary labours of man are sufficient to excite some; others are brought on by atmospheric vicissitudes. A very large proportion of them, however, are wholly independent of exterior agency. Witness, in children, the variety of such disorders which accompany the process of dentition. Witness, in adults, the first appearances of gout and rheumatism.

The principal disorder of this class which swells Mr. Farr's black book is infantile convulsion; next to it is pneumonia, and near them stands hydrocephalus. Very nearly one-sixth of the total mortality of the country is attributable to these three diseases, naturally grouped together as being the eldest offspring of abnormal dentition.

The total amount of mortality by the diseases of this class, the fevers of internal origin, is 200 per 1000. The sum total, therefore, will give the following

Analysis of the Tables of Mortality of England and Wales.

	Per Thousand.
Deaths by old age, debility, and its associated disorders	175
—— chronic disorganisations of the viscera	225
—— the zymotic diseases	200
—— acute diseases of internal origin	200
—— consumption, or pulmonary decay	170
—— open violence	30
Total	1000

It thus appears that 30 per 1000 are the victims of open violence, the fourth and last of the classes into which I divided the several modes of human extinction.

Decay being my theme, I am prevented from entering on the consideration of the many interesting questions which violent deaths suggest; I will only state that they are exceedingly uniform, averaging throughout England and Wales nearly 12,000 annually. The number for the years 1838-39 and 40, were 11,727, 11,632, 11,594. This is, compared to the total mortality, as 32 per 1000; in reference to the population, it is as 8 to every 10,000 persons living.

Decay in the male sex is considerably more rapid than in the female. In the three years ending June 30, 1840, the total number of deaths among males throughout England and Wales was 518,006, while the deaths among females were only 499,058, giving an excess of male deaths, in three years, of 18,948.

After this statement, it cannot appear surprising to you that the number of females in any country should notably exceed the number of males. At the present time, in London, there are 996,000 females to 878,000 males, or an excess of 118,000 ladies. Coupled with this fact, and obviously depending on it, is the superior longevity of the female sex. There died throughout England and Wales, between 1st July, 1839, and 30th June, 1840, 5,247 females, aged 85 and upwards; whereas, of the same age, there died only 3,954 gentlemen, leaving what is called in the city a *balance* in favour of the old ladies of 1293. Among the females who died, 71 had passed the age of 100, but only 40 males.

There are only three diseases, common to the sexes, which carry off more females than males; they are consumption, cancer, and dropsy. The deaths by childbirth form but a very small fraction of the mortality in the female sex. The proportion is only 8 per 1000 of the total mortality; and as (unfortunately) half a million of children are annually born in England and Wales, and scarcely 3000 deaths take place in childbirth, so there is only 1 death to 170 confinements!

The researches of the registrar-general have brought to light some singular results with reference to the proportion in which acute disease affects the two sexes. In the zymotic tribe the UNIFORMITY is quite extraordinary. Thus, out of 8194 persons dying of measles in 1840, throughout England and Wales, 4143 were males, and 4051 females, a difference of only 92. Again, out of 17,862 persons dying of scarlet fever in the same year, 8927 were males, and 8935 were females, a difference of only 8! On the other hand, it appears that out of 14,806 dying of pneumonia, 8177 were males, and only 6629 females. Out of 22,787 dying of convulsion, 12,689 were males, and only 10,098 females

The superior value of female life, which these and all statistical considerations tend to prove, and which our insurance offices, by their variation of rates, acknowledge, is not attributable to any differences in the original construction of the body, for man is built of stronger materials than woman, but first, to the smaller demand made upon her vital power during the middle period of life; secondly, to the healthier condition and temperature of the female mind; and thirdly, to the lesser amount of toil and anxiety which, in a highly civilised country, falls to the share of woman.

I must say one word regarding the influence of trade and occupation on the average rate of decay in the human frame. The greatest foe to health and long life is poverty. Not only do all epidemic visitations fall with tenfold severity upon the poorer classes of society, but all descriptions of disease find in them their chief victims. It has been found, in France, that of an equal number of infants taken from among the poor and those in easy circumstances, the proportion of deaths among the former is as 2 to 1.

Soldiers are, of all classes of society, the most obnoxious to severe disease and rapid decay. The result of an inquiry made by Mr. Edmonds (an eminent London actuary) into the loss sustained by the British army during the Peninsular war, has shown, that whereas in England the average annual mortality is now 22 out of every 1000 of the population, the mortality among soldiers in time of active warfare rises to 160 per 1000! Out of this number, 40 per 1000 occur from wounds received in battle, and 120 per 1000 from disease and privations, and the other miseries attendant on war.

Happily, wars have ceased, and a gradual improvement is taking place in the value of human life. Every year a larger proportion of the population are carried forward to advanced age and die of the disorders which advanced age entails. In the time of the Romans, the expectancy of human life was not more than 25 years. A life was not then worth more than 25 years' purchase. Great changes have since occurred. The Geneva tables show that from

1750 to 1800, the mean duration of life in that town was 34 years and a half. In 1833 it was 45 years and 29 days! At Paris, among the easy classes, the mean duration of life is calculated at 42 years. In England, according to the calculations of Mr. Finlaison, it is now 50 years; so that the expectancy of life, the number of years which a child may be expected to attain, is double what it was at the commencement of the Christian era.

No one can doubt that if much of this improvement is attributable to the effects of medical science, more is due to the humanising effects of the Christian religion—a religion which has reared the majestic institutions for the reception of the sick and indigent poor which overspread the land, in one of the oldest and noblest of which we are now assembled—a *religion* which has diffused throughout society that spirit of active benevolence which incessantly labours to lessen the sum of human misery, and protract the period of man's decay.

CASE OF

STRANGULATED INGUINAL HERNIA,

TREATED BY OPERATION, AND FOLLOWED BY

VOIDANCE OF A PORTION OF THE ILEUM.

By E. P. Davies, Esq., Surgeon, Christchurch.

James Curtis, a stout, healthy labouring man, ætat. 46, who had for some months observed a slight fulness about the right inguinal canal, but which occasioned him little inconvenience, was engaged on Saturday, December 10, 1842, in the New Forest, filling a cart with marl, which, from its weight and tenacity, required considerable muscular exertion to raise. In the afternoon, while stooping at his work, he was suddenly seized with violent pain in his right groin and epigastrium, which, not subsiding, he was brought home in a cart to Burton, and late at night I was sent for. I found him suffering extreme pain in the abdomen, and occasionally vomiting, but not violently; there was a hard and painful tumour in the scrotum as large as a hen's egg, in shape and feeling very like a swelled testicle, the neck being distinguished with much difficulty, as it was situated behind the tumour, and the fulness in the inguinal canal, owing to the thick layer of fat over it, being scarcely perceptible. The bowels had been freely moved in the morning. The history of the case leaving no doubt of its being a strangulated inguinal hernia, I attempted to return it, but without success, and as the symptoms were not urgent, and the strangulation quite recent, and the tumour exceedingly tender, I ordered rags, wet with cold water, to be constantly applied during the night. In the morning I visited him again, with three surgeons residing in the town, and found the tumour increased in size, but far less painful, and the other symptoms unaltered. After bleeding to the extent of twenty-five ounces, the taxis was again applied, and by perseverance a large quantity of flatus returned into the abdomen, and the hernia so reduced in bulk as to be imperceptible. Indeed, the fatness of the pubic region and the extraordinary thickness of the scrotum rendered it impossible to ascertain whether the hernial sac was completely emptied or not. The sickness and pain in the epigastrium were quite relieved for the time, and an aperient was given. By the next morning, December 12th, the tumour had regained its former size, and the distressing symptoms had returned; the bowels had not acted, and the vomiting was becoming frequent, but without any stercoraceous odour; the countenance was anxious and the pulse 90, and soft; the hernia was very painful.

It was, therefore, determined to operate at once, which, with the assistance of the gentlemen who saw him with me on the day before, I proceeded to do. The sac was easily laid open, and a small quantity of dark-coloured fluid escaped, the bowel appearing of a purple hue, but perfectly free from softening in any part, or from odour. The inguinal canal was so extremely narrow that great difficulty was experienced in introducing the point of the little finger; but by perseverance the stricture was gained, and was found to be situated near the middle of the canal. It embraced the gut so closely that the probe point of the hernia-knife would scarcely enter it, and it was freely divided so as to allow the finger to pass into the abdominal cavity. There were no adhesions formed by the strangulated portion of the gut, but it required some patience and management to get it to pass back into the abdomen, which it did in about ten minutes. A few sutures were introduced to bring the divided integuments together, the wound lightly dressed, a compress applied, and the man put to bed. He was not exhausted by the operation, and a mixture of salts, senna, and jalap was given, which acted in the course of the night.

13. He is rather feverish; the tongue white, and inclined to be dry; the pulse 90, and soft; the wound tender, with slight pain in the right inguinal region, increased by pressure.—℞ *Calomel*, six grains; *compound ipecacuanha powder*, two grains and a half. Mix for a powder, to be taken immediately.

14. He is better, and less feverish; there is slight nausea, and his bowels have not acted to-day.—℞ *Calomel*, five grains; *powdered rhubarb* and *jalap*, of each ten

grains; *compound powder of ipecacuanha*, three grains. Mix for a powder, to be taken immediately.

15. No movement of the bowels; the pain is rather increased in the right inguinal region; the pulse soft, and about 90; the tongue white and moist.—℞ *Calomel*, four grains; *croton oil*, two drops. Mix in a pill, to be taken immediately.

16. The bowels have been well opened, and he is better in every respect; the tongue less white, and the pain in the groin less. Two drops of croton oil to be taken at night.

From this time he continued to improve daily, the pain in the abdomen became more circumscribed, and concentrated itself over the cœcal end of the ileum, which continued tender and hard; every other part of the abdomen would bear hard pressure without causing pain; his bowels acted daily, his tongue became clean, and his pulse ranged from 76 to 82.

25. He was seized to-day with severe pain in the abdomen, over its whole extent, with vomiting, extreme flatulence, and swelling of the abdomen. I found him propped up in bed with pillows, as he felt he would be suffocated if he lay down; the pulse 82, small and soft; the countenance anxious and pale; the pain almost constant, but not increased by pressure; the bowels have not acted since yesterday.—℞ *Powdered rhubarb, carbonate of magnesia*, of each twenty-five grains; *compound tincture of lavender*, a drachm; *aromatic spirit of ammonia*, three drachms; *tincture of opium*, forty minims; *peppermint water*, five ounces and a half. Mix. A fourth part to be taken every six hours.

After the first dose the symptoms abated in violence, and the second removed them altogether. Still, however, the tenderness continued in the right side. The mixture, omitting the opium, to be continued every six hours.

26, 27, 28. Continues much better. Allowed a little mutton-broth.

29. In the middle of the day he was again very sick, with pain in the bowels, but in the evening he had a copious evacuation, which at once relieved him, and in this motion the nurse observed something unusual, so she saved it for my inspection. This proved to be *six inches of the intestine* which had been strangulated, and which had insinuated itself into the sound portion of the bowel towards the colon, and after the two sound ends had united, had been thrown off, and passed away per anum. Continue the mixture.

30. Improving; the bowels have been moved, and his appetite mends.

31. The appetite is not quite so good; the bowels open; the tongue clean; the pulse weak.—℞ *Disulphate of quinine*, half a grain. Make a powder, to be taken twice a-day.

Jan. 1. He continues to improve, the tender spot in the side disappearing daily, his appetite becoming very good, and the wound almost healed.

9. He was to-day again seized with an attack of colic, similar to that of Dec. 25th, though not so severely; the bowels are confined.—℞ *Powdered rhubarb* and *jalap*, of each ten grains; *compound powder of cinnamon*, five grains. Mix for a powder, to be taken immediately. *Compound senna mixture*, an ounce and a half, to be taken four hours afterwards. Omit the quinine. In the evening the medicine had not operated, and he was no better.—℞ *Croton oil*, two drops. To be taken immediately.

10. Much better; the bowels have been well moved, and he continued to mend rapidly from this time.

Feb. 2. He applied a truss for the first time, which, in a few days, he could bear on him the whole day, and on the 9th he was able to come down stairs. The only drawback he has since had has been from a want of tone of the mucous membrane of the bowels, and this I have since discovered arose from his not having been allowed a sufficient quantity of nourishing food, which I had ordered him. About a fortnight since I had him removed from the house where he lay during his illness, and placed him for a week in a situation where I could insure his comforts being attended to, and his improvement was so rapid that at the end of that time he was able to bear a journey of twelve miles to the union workhouse at Wimborne.

The portion of intestine voided is about six inches in length, of a brownish ash-colour, and quite smooth on its serous surface, and of a dirty chocolate colour, and rough on its mucous surface. The edges of the divided ends are smooth, and appear as if cut off by blunt scissors. The mesentery is separated close to the intestine, and between the layers are a few enlarged mesenteric glands. The bowel is quite firm and tough, and as there are no valvulæ conniventes, and as the pain was always referred to the right side, near the cœcum, I presume that the separated part is a portion of the ileum.

Christchurch, Hants, March 14, 1843.

THE WAY TO MAKE A LONG STORY SHORT.

Boyer was one day consulted by a woman of loose character who affected a great deal of modesty. Wearied out with her affectation in the recital of her complaints, he said bluntly, "Madam, you have had the venereal disease!" "What do you mean, Sir?" said the dame, indignantly; "never, I can assure you!" "Then you have it now," said the surgeon. "You are mistaken, Sir." "Well then you will have it!" and with this the conversation terminated.

CASE OF

DELIRIUM TREMENS,

TREATED WITH

BELLADONNA, APPLIED EXTERNALLY.

By SAMUEL FLOOD, Esq., Surgeon, Leeds.

S. H., a publican, ætat. 36, a married man, but without family, has been in the habit for several years past of drinking to an enormous extent. He has been by no means nice in his choice, ale, wine, and spirits having each had their several attractions for him; of the first of these he himself told me that he frequently drank forty glasses a-day.

I had attended him in several previous attacks of delirium cum tremore, the symptoms of which always yielded to ordinary treatment. On the 28th of January last I was summoned to attend him at four, a.m., when I found him sitting up in bed, presenting that peculiar expression of countenance which consists in an admixture of determination, wildness, and saucy cunning. When spoken to, however, he usually answered correctly, though occasionally wide of the mark, exhibiting at various times either a considerable degree of fierceness or much unnatural politeness. When suffered to be still he kept up a low, incoherent muttering, or occupied himself in catching at some imaginary object. He complains of much pain and weight in the head; skin hot and dry; pulse 100, weak and irritable; tongue clean but pallid; the urine, which he passes in very small quantities, and with apparent difficulty, is of a dark-brown colour, and strongly offensive odour; the bowels are inactive; there is a sub-tremulous motion of the hand when extended; the muscular fibre is generally soft and flabby; he has never slept for the last week. I learned from his wife that for many days past he has voided large quantities of blood by stool, no doubt the result of obstructed circulation through the liver, which is much diseased. Ordered the head to be shaved and washed with a cold evaporating lotion. To apply twelve leeches to the temples, and to take the following powder immediately:—

℞ *Chloride of mercury*, ten grains;
Powder of jalap, fifteen grains. Mix. With a wineglassful of an ordinary cathartic mixture every two hours, till the bowels acted *freely*.

One, p.m. Not so boisterous, rather less headach. The leeches have bled well; the bowels have not acted. Ordered a wineglassful of the cathartic mixture every hour till the effect is produced.

29. The medicines have purged freely, and brought away a quantity of black, offensive matter; headach relieved; pupil very much contracted; pulse 100; has not slept, being constantly in a state of restlessness and agitation. Ordered,—

℞ *Hydrochlorate of morphia*, two grains, subsequently increased to ten grains;
Potassio-tartrate of antimony, a grain and a half, afterwards increased to eight grains;
Confection of roses, sufficient to make eight pills; one to be taken with each dose of the following mixture:—

℞ *Sesquicarbonate of ammonia*, two scruples;
Tincture of opium, a drachm, subsequently increased to an ounce;
Camphor mixture, eight ounces. Mix, and give two tablespoonfuls every two hours.

30. Has not slept; continues the same as yesterday; the bowels have acted twice; urine passed in larger quantities, and is less offensive; pain in the head returned. Ordered—Take eight ounces of blood by cupping; continue medicine, but increase the morphia and tartrate of antimony each to four grains.

Feb. 4. Since the last report the symptoms have been gradually getting worse. All the usual medicines have failed to procure rest. Hyosciamus, opium, and morphia, in every variety of form, and combined in various proportions with digitalis and antimony, have all been given and carried to the furthest practicable stretch: together with these a certain quantity of his usual stimulant has been allowed him. Affusions of cold water have been tried, and, indeed, everything that suggested itself likely either to force or entice sleep, without exerting the slightest salutary influence. He has been in a state of ungovernable wildness, evincing every conceivable kind of temper and caprice, sometimes dashing to pieces everything within his reach, at others holding his fancied carousals with his old associates, occasionally pouring out the most fearful imprecations upon his attendants, and politely ending by a pressing invitation to some imagined festivity; but amidst all this he has had momentary glimpses of recollection, during which he has been perfectly conscious of his condition, and begged with piteous earnestness that everything might be put out of his reach by which he could do himself or others injury. Such is his present condition. The bowels have not acted for two days; pulse 110, weak, and very irritable; pupil much contracted; has never slept for three hundred and sixty hours. Ordered to omit all the medicine, to clear the bowels by castor oil and a copious injection, and to apply over the spine (between the scapulæ) a good sized blister.

5. The bowels have been well cleared; in all other respects the same; has not slept

during the night. The blister has raised well. I proceeded to strip off the cuticle to the extent of three inches long by two wide, and laid over the denuded surface a plaster of *pure extract of belladonna*. Previously he had been as boisterous as ever, but so acute was the pain of the application that he became instantly subdued, tears rolled from his eyes, and he supplicated for its immediate removal. In three minutes he ceased to complain; in five minutes slight twitchings of the facial muscles and the arms commenced, his utterance became indistinct, and he now kept up a stupefied laugh, like a man very much intoxicated; the pupils, which had been before very much contracted, began rapidly to dilate, and in seven minutes were opened to their fullest extent. He now became very drowsy, and begged to lie down. I then sponged off the belladonna from the blistered surface, put on a dressing of simple ointment, and let him fall back on his pillow. In nine minutes from the first application he was in the most profound sleep. This sleep continued uninterrupted for seven hours. There was no laborious breathing, no stertor, but he lay perfectly still, and seemed in the enjoyment of deep and undisturbed repose. During the operation the pulse fluctuated remarkably; at the commencement it was 110, small and irritable; in five minutes it had risen to 140, and in twenty minutes to 160; it then gradually fell, till at the end of six hours it had sunk to 108, and was both full and soft. At the end of seven hours he awoke quite quiet, but after staring about him apparently in stupefied astonishment, he soon relapsed into his previous state of wildness.

7. Nine, a.m. Since the last report the patient has been in a state of continued wakefulness. The opiates in large doses have been again had recourse to without the slightest good effect, and he is apparently sinking from the prolonged excitement; it was, therefore, determined again to have recourse to the external application of belladonna; for this purpose another blister was applied a little higher on the spine than the former one, and all other medicines were omitted.

Seven, p.m. The blistered surface was denuded to the extent of one inch and a half square, and the belladonna applied as before; precisely the same results followed as on the first occasion, though more slowly, it is presumed, from the smaller exposed surface. The pulse attained its maximum speed (152) in ten minutes, the pupils dilated largely, and in twenty-five minutes sound sleep was induced, which continued unbroken for *nine hours and a half*. At the end of that time he awoke, and remained quite tranquil for some time, but beginning again to relapse.

8. Nine, a.m., applied the belladonna over the same surface; sleep was induced in twenty-six minutes, which lasted for four hours and a half, when he awoke perfectly subdued. He was quiet for the remainder of the day, and occasionally appeared somewhat conscious. The bowels acted three times in the course of the day. The pulse fell gradually, and at twelve, p.m., had sunk to 70.

9. Has passed a very tranquil night, but has not slept; has had several lucid intervals, calling his attendants by name; pulse 64, slightly intermittent, full, and soft; tongue clean and moist; evacuations natural; pupils remain much dilated. Ordered to have no medicine; room to be kept dark, cool, and quiet, so as to invite sleep.

10. Continues to improve; rational intervals more frequent; has slept naturally for some time. He has been anxious for and enjoyed his food, but obstinately refuses his ale and porter, saying, "No, they have brought me to this; I will have no more of them." Pulse 86, but soft and regular.

11. Passed a tranquil day, sleeping naturally; is perfectly rational.

13. Slept nine hours; improving in all respects.

22. Convalescent.

Remarks.—In this case I entertain no doubt that but for the external use of belladonna this patient would now have been *moribund*. That it should act in these cases after the most powerful medicines have so signally failed when administered internally, is perhaps not very singular when we reflect that the sensibility of the nerves of the stomach must, in a great measure, have been rendered defunct by long-continued abuse, so that they were incapable of receiving the usual impressions, or transmitting them to the brain. The organ itself evidently maintained its integrity; witness its immediate response when the belladonna was applied to a new nervous surface.

I am persuaded, from my observation in this and other instances, not only of delirium, but of cases involving a large amount of nervous irritability and excitement, that we possess no medicinal agent whose action is so immediate and so *irresistible*, and, at the same time, under certain and proper precautions, so safe and innocuous as belladonna, applied in the manner I have endeavoured to describe.

St. Paul-street, Leeds.

TREATMENT OF INSANITY.

FASTENINGS ATTACHED TO THE LIMBS.

To the Editor of THE LANCET.

SIR,—In my present letter I propose to enter on the consideration of a subject which has of late attracted much and deserved attention, namely, the question as to the propriety of applying fastenings to the limbs of patients affected with insanity. I cannot be insensible to the great importance of this

question, to its various bearings, and to the difficulties which beset it on every side. In the first place, the most deeply-rooted prejudices in favour of a practice universally adopted in all ages and countries are natural, and it cannot be expected that they will be easily overcome. The words "madmen," and "shackles," have become so closely associated in the minds of every one, that the attempt to break the connection is, by many, looked upon as an absurdity, a thing impossible, and utterly unworthy of consideration. In addition to these general prejudices, the angry spirit which has of late arisen during the discussion of this question has not disposed those who are interested in it to take a dispassionate and comprehensive view of the subject. I trust, however, and I sincerely hope, that every one engaged in the treatment of insanity will, ere this, have seen the necessity of endeavouring to contemplate so great a question in all its bearings with one, and only one, object in view, namely, the benefit of the unfortunate beings under their charge. The time has, I hope, arrived when we can do this with a fair prospect of arriving at a true knowledge of its importance; the storm of contention which a short time ago was raised has abated, and they who have ceased to pursue the practice of fastening the limbs of their patients have had the advantage of considerable experience, and are now able to form more exact and practical conclusions on the subject.*

Although under a fear of wearying your readers by repetition, yet, in entering on the consideration of this point of practice, I beg again to impress on the minds of your readers the paramount importance of ascertaining the causation of that which we are called upon to remedy. If, for instance, an act of violence, or a paroxysm of excitement, be brought under our notice, our first step ought to be the investigation of its origin; we endeavour to discover the source of irritation, and having done so, the line of treatment is obvious.

But has it been the custom to enter on this course of investigation? Does not the physician too commonly allow his thoughts to dwell on the simple act of violence, or on the existing state of excitement which has arrested his attention—does he not content himself with the adoption of such means, and such only, as are calculated to incapacitate the patient from inflicting injury on others, regardless of the injurious effects those very instruments are calculated to produce on the patient himself? Does he not, by so doing, entirely overlook the necessity of devising expedients to allay the existing symptoms of excitement, or to prevent their recurrence in future? Nay, more, does he not, by the very instruments he applies to the person of the patient, place upon him a permanent and galling source of irritation; and does he not, therefore, when endeavouring to prevent mischief to others by fastening the limbs, aggravate the malady in the patient himself? Does he not, in his endeavours to *restrain* a symptom, excite and keep up the irritation which it is his duty to sooth and alleviate.

On the mind of any one who has had the opportunity of observing the two opposite modes of treatment, no doubt whatever can remain that by shackling the limbs of his patients the physician is most certainly aggravating the morbid action; he is, by so doing, committing an error in practice, which a very little reflection on his own part would correct. It cannot be doubted that whatever promotes the continuance of morbid action tends to confirm the malady, and that whatever tends to allay such action must be classed amongst the curative means. Let us ask ourselves in which way binding the limbs together, by iron or by any other means, can act soothingly on the mind of an agitated and irritated patient. I am, Sir, very obediently yours,

G. L.

March 7, 1843.

* We do not agree with our correspondent that the points in question have been discussed with irritation and passion. We doubt if any extraordinary change was ever so thoroughly effected in a common custom with so little evidence of annoyance, vexation, and intemperance existing on the feelings of its debaters.—Ed. L.

EXAMINATIONS OF THE OVARIA DURING MENSTRUATION.

To the Editor of The Lancet.

Sir,—There is no person, I believe, who has read Mr. Girdwood's paper on Menstruation, No. 1018, page 825, who would not arrive at the conclusion that Mr. Girdwood was the first observer who had examined the ovaria during the menstrual flux. It appears, however, that that *is not the fact*, and I think that Dr. Grant and Mr. Girdwood are both called upon to explain why they made no allusion to the observations of Kirkringius, in 1672; to the dissections of Mr. Cruikshank, in 1797; to those of Dr. Robert Lee, in 1831 and July 1832; or to the more recent ones of M. Gendrin, and M. Negrier, in 1839.

It is most probable that Kirkringius believed that ova were discharged from the ovary during each monthly period, as the following observation taken from his book will fully testify. "Aliquando," says that author, "fœminæ dejiciunt hoc ova imprimis tempore menstruorum."

In the article by Dr. Robert Lee, published in the third volume of the "Cyclopædia

of Practical Medicine," in 1834, there is the following account of the appearances observed by Mr. Cruikshank in the ovaria of a woman who died during menstruation: "I have also," says Mr. Cruikshank, "in my possession the uterus and ovaria of a young woman who died with the menses upon her. The external membranes of the ovary were burst at one place, from which I suspect an ovum had escaped, descended through the tube to the uterus, and was washed out by the menstrual blood."

This statement was copied into Dr. Robert Lee's paper from the "Philosophical Transactions" for the year 1797.

It is, therefore, impossible that Mr. Girdwood could be ignorant of this important observation, made in the year 1797, as he acknowledges having read Dr. R. Lee's paper wherein the above statement is contained, and I am now most desirous of knowing the reason why he did not allude to the above passage, as well as to the three following dissections, by Dr. Robert Lee, which were made before the death of Ann Davis, which took place in November 1832, and not December, as asserted by Mr. Girdwood.

The three dissections are thus given at page 226 of the third volume of the Cyclopædia :—

Case 1.—On the 11th of March, 1831, we examined the body of a young woman who died, during menstruation, from inflammation of the median basilic vein. The left ovarium was larger than the right, and at one point a small circular opening, with thin irregular edges, was observed in the peritoneal coat, which led to a cavity of no great depth in the ovarium. Around the opening, to the extent of three or four lines, the surface of the ovarium was of a bright-red colour, and considerably elevated above the surrounding part of the peritoneal coat. On cutting into the ovarium, its substance, around the opening and depression, was vascular, and several Graafian vesicles of different sizes were observed. The right ovarium was in the ordinary state. Both Fallopian tubes were intensely red and swollen, and their cavities were filled with menstrual fluid. The lining membrane of the uterus was coated with the same fluid, and the parietes were soft and vascular. The size of the uterus was not increased.

Case 2.—In the autumn of the year 1831, a woman, under twenty years of age, died suddenly, from acute inflammation of the lungs, while menstruating. The body was examined by Mr. John Prout, and the uterine organs were brought to us for inspection. A red, soft, elevated portion of the right ovarium was also here observed, and at one part the peritoneal coat, to a small extent, had been removed. The edges of the opening were extremely thin and irregular, and in the substance of the ovarium, under the opening, was an enlarged Graafian vesicle, filled with transparent fluid. Numerous small blood-vessels were seen running along the peritoneal coat of the ovary to the opening. When the substance of the ovarium was laid open, several vesicles of various sizes, and different depths, were found imbedded in it. The left ovarium presented a natural appearance. The free extremities of the Fallopian tubes were gorged with blood; their cavities were filled with a red-coloured fluid. The uterus was not enlarged, but the parietes were gorged with blood, and the lining membrane of the fundus was coated with menstrual fluid. A small coagulum of blood likewise adhered to the upper part of the uterus.

Case 3.—On the 2nd of July, 1832, Sir Astley Cooper, to whom Dr. Lee had mentioned these cases, sent him the ovarium of a woman who died from cholera while menstruating. The ovarium was much larger than natural, and at one point there was a small irregular aperture in its peritoneal coat, through which a slender coagulum of blood was suspended. On cutting into the substance of the ovarium it was found to be occupied by three small cavities or cysts, one of which was filled with a clear ropy fluid, another with semi-fluid blood, and the third, which communicated with the opening in the peritoneal coat of the ovarium, with a firm coagulum.

The case of the female who died on the 18th of November, 1832, and whose uterine organs were presented to Dr. Robert Lee by Mr. Girdwood and Mr. Webster, is also thus related in the same Cyclopædia, page 227 :—

On the 18th of November, 1832, the uterine organs were removed by Messrs. Girdwood and Webster from the body of a young woman who had died suddenly, the preceding day, when the catamenia were flowing. Both ovaria were remarkably large, and both Fallopian tubes were red and turgid. The peritoneal coat of the left ovarium was perforated at that extremity which was nearest to the uterus by a circular opening, around which aperture, for several lines, the surface of the ovarium was elevated, and of a bright red-colour, like extravasted injection. The margin of this opening was thin and smooth, and did not appear to have been produced by laceration. Its centre was slightly depressed below the level of the edges, but there was scarcely the appearance of a cavity beneath. The right ovarium was much larger than the left, and when cut into, a cavity, or cyst, was found, which was filled with half coagulated blood. The peritoneal coat of this ovarium was entire.

The uterus was large, and when cut into, the parietes appeared to contain an unusual quantity of blood. The inner membrane

was of a bright-red colour, and coated with a thin layer of catamenial fluid. Both Fallopian tubes were red and turgid, and the interior of the left was filled with menstrual fluid; but nothing in the form of a Graafian vesicle could be detected in the tube. The appearances now described have been accurately represented in a drawing made from the parts within two hours after they came into the author's (Dr. R. Lee) possession.

Dr. Robert Lee concludes, in the most able paper, from which I have made the above selections, "that it is not to the influence of the uterus that we are to attribute all the changes which take place in the mammæ and uterine system at the period of puberty, but that *all the phenomena of menstruation depend upon, or are connected with, some change in the Graafian vesicles*, in consequence of which an opening is formed in their peritoneal and proper coats." "Whether an entire vesicle, or only the fluid it contains, escape through this opening at the period of menstruation," he adds, "further observation may hereafter determine."

The cases related by Dr. Gendrin, in the "Traité Philosophique de Médecine Pratique," published in the year 1839, may be thus briefly noticed:—

In the first case the left ovarium was vascular, and in the middle was an aperture about a line in diameter, with an irregular margin; its cavity would have contained a hemp-seed; its walls were red; and it was obviously a ruptured Graafian vesicle.

In the second case a small circular ragged opening led to a cavity about two lines in diameter, its walls being of a bright-red colour.

In the fourth case the right ovary had an aperture a line and a half in diameter, leading to a small cavity with vascular parietes.

M. Negrier has also related similar cases which have come under his observation.

It is thus proved beyond doubt that neither Dr. Power nor Mr. Girdwood are entitled to the praises so lavishly bestowed upon them by Dr. Grant, and that if Dr. Grant was ignorant of the observations and dissections of those distinguished physiologists whose opinions have been above stated, he ought not to have stood sponsor to a paper of the merits of which he could not be a judge.

Knowing the interest which you at all times take in seeing justice done to those against whom any unfair advantage has been taken, I am sure you will kindly insert this note in your valuable journal. I am, Sir,

A. B. C.

The cause of the right arm or right leg being stronger is congenital, depending on the more perfect development.—*Dr Knox.*

AFFECTION OF THE HEAD FOLLOWING SCARLATINA.

BLEEDING.

To the Editor of THE LANCET.

SIR,—I shall feel much obliged by your inserting the following case in your truly valuable periodical:—

John Cooke, ten years of age, of a rather delicate appearance, had scarlatina very favourably about five weeks ago; some days after his recovery slight dropsical swellings ensued, which were removed by the administration of some active purgatives. On Monday, March 13th, I was informed that he was taken dangerously ill, and my immediate attendance was requested. I was, however, prevented from seeing him until the next morning, when my patient appeared as follows:—He was totally blind in both eyes; the pupils were rather contracted, but quite immoveable, even when exposed to the glare of a strong light; the face was swollen, and of a death-like paleness; no particular heat either of the head or temples; the pulse was very quick, feeble, and irregular; he was exceedingly restless, in a state bordering on stupor or delirium, with occasional intervals of consciousness. Thus, he was enabled to state that he could not distinguish the slightest object, not even the light of a candle, and he complained of great pain all over the head. Soon after answering my questions he became delirious. The parents stated that on the evening before the boy suddenly complained of pain in the head; that he was removed to his bed, that shortly after he could scarcely distinguish the figures on the bed-curtains, and that in half an hour he became *totally blind*. This was at about six o'clock. At twelve o'clock he had a convulsive fit, foaming at the mouth, the mouth drawn towards the eye with gnashing of the teeth. Coma followed, attended with a snorting so loud as to be heard at the adjoining house. In this comatose state he continued until about eight o'clock on the following morning (about three hours before I called) when a similar fit recurred, only of longer duration. I may here observe that a purgative containing calomel had been sent on the night before, and had acted very powerfully, and that a large blister had been applied to the nape of the neck, which was discharging very freely.

Considering the case to be one of the most dangerous description, I at once bled the boy to about twenty-five ounces. After the first twelve ounces had been abstracted the pulse slightly rose, and he became more composed, and at the conclusion the respiration was far more natural, and the patient shortly sunk into a deep sleep; a sleep very different, the parents stated, to that he had previously experienced. I ordered the head to be shaved, and a large blister to be ap-

plied to the entire scalp, and three grains of calomel to be administered every three hours. I saw my patient on the following morning at about eight o'clock, and found that both vision and consciousness were perfectly restored, and that every bad symptom had entirely subsided. The blood was more than six parts serum; the crassamentum was slightly cupped, and very firm. I have since visited him several times, and he is daily improving. I am anxious to report this case, because I feel confident that its successful issue was entirely owing to the free abstraction of blood. I should not certainly have ventured upon so bold a measure but for the interesting case detailed by Dr. Marshall Hall about eighteen months ago in THE LANCET. I am, Sir, your very obedient servant,

W. TAYLER.

Tywardreath, Cornwall,
March 20, 1843.

EFFECT OF ALCOHOL ON THE SYSTEM.

To the Editor of THE LANCET.

SIR,—Although I do not consider that the opposite of what Liebig has inferred in reference to the influence and condition of alcohol in the system has been proved, it may not perhaps be going too far to say that his deductions are not conclusive, and that the subject still requires accurate investigation. As his commentator, Mr. Ancell, in the pages of THE LANCET, seems to have a different opinion, it may not be out of place here to recur to the admirable experiments of Dr. Prout, made in 1813, which have certainly not been supplanted by any of the observations of foreign chemists; and it were to be wished that Englishmen would attend rather more to what has been done in their own country. The controversy at present waging between Liebig and Dumas must make our countrymen pause before setting aside the experiments made in this country upon organic bodies, and may ultimately convince them that the methods of investigation pointed out by Dr. Prout upwards of twenty years ago, are only beginning to force themselves upon the attention of foreign chemists. I think, Sir, that you would confer a great obligation on your readers by a reprint of Dr. Prout's paper on Respiration, published in the 2nd vol., p. 328, and 4th vol., p. 331, of the "Annals of Philosophy." The passage referring to the effect of alcohol upon respiration is to the following effect:—Alcohol and all liquors containing it which he tried, he found to have the remarkable property of diminishing the quantity of carbonic acid in the expired air much more than anything else which he made the subject of experiment. When porter was taken at dinner the quantity was always much reduced below the natural standard, while the reverse was the case when water was taken. This induced him to extend his experiments, the result of which was, that *alcohol in every state, and in every quantity, uniformly lessens in a greater or less degree, the quantity of carbonic acid elicited, according to the quantity and circumstances in which it is taken.* When taken on an empty stomach its effects were most remarkable, the depression being almost instantaneous; after a short time the powers of the constitution appear to rally, and the quantity rapidly increases; then it sinks again, and afterwards rises slowly to the standard. On a full stomach, as after dinner, the effects of vinous liquors are very slow, but no less sure and remarkable. Dr. Prout has even thought them more permanent. As long as the effects of alcohol are perceptible so long is the quantity of carbonic acid gas emitted below the standard. With Dr. Prout these effects went off with frequent yawnings, and with a sensation as if he had just awoke from sleep. Under these circumstances the quantity is much above the standard, and hence it may be concluded that the system is then freeing itself from the carbon retained by the influence of the alcohol. The effect of strong tea is somewhat similar.

The following table is exceedingly interesting. The first column gives the hours of experiment; the second the standard percentage of carbonic acid at these hours; the third the observed quantity; and the fourth the state of the pulse:—

H.	M.				
a.m.					
11	40	4.0	4.0	70	Before taking wine.
12	10	4.05	3.	72	Five minutes after taking three ounces.
12	30	4.0	3.4	76	Example of oscillation.
1	0	3.95	3.1	78	
1	25	3.86	3.1	78	
3	0	3.66	3.	84	Twenty minutes after a walk and dinner.
3	30	3.6	3.1	78	
3	55	3.56	3.	74	Ten minutes after taking half a pint of wine.
4	5	3.54	3.	78	Slight effects of ditto observable.
4	30	3.50	2.70	78	Very strong effects of ditto, as vertigo.
5	0	3.46	2.90	76	
8	5	3.32	3.60	76	Effects gone off; frequent yawnings.

The standard was resumed 5h. 45min. after having taken the wine.

In this detail of experiments, which, however, is not isolated, as Dr. Prout repeated it often, we learn that alcohol enormously depresses the combustion of the carbon of the system during its existence in the body, if we may so judge of the presence of a cause by its effects. We cannot conclude with certainty that the alcohol suffers no combustion, it is true; that it undergoes a slow combustion, if any, we may infer from its odour lingering about the person for a long period. Mr. Ancell observes, that the odour is not alcohol; yet we must remember that this odour is one of its most striking sensible properties, and enables us in many cases to detect its presence in minute quantities when other means fail.

I trust, Sir, you will excuse this intrusion on your patience; I have been so tedious because I think the views of Liebig highly ingenious, and calculated to impart a great stimulus to medicine. But, at the same time, you will agree with me that we ought to be exceedingly cautious in drawing too sweeping conclusions, and that we must acquire a greater amount of facts than we at present possess before we can infer that alcohol is such a valuable article of animal combustion as some might be led to infer from the passages quoted in THE LANCET from Liebig's able work. Your obedient servant,

March, 1843. D.

AN EXPOSITION OF THE LAWS

WHICH RELATE TO THE

MEDICAL PROFESSION IN ENGLAND,

SO FAR AS REGARDS THE

COLLEGE OF PHYSICIANS.

(Concluded from page 902, Vol. I)

THE charter of Hen. VIII. gives the College of Physicians the power of electing annually four persons (censors) who shall have the supervision, scrutiny, correction, and government of all the physicians practising the same faculty within the City of London, or within seven miles round the same, and the *punishment* of them for their delinquencies in the *improper* practice, exercise, and use of the said faculty,—*ac punitionem eorund' pro delictis suis in non bene exequendo, faciendo et utendo illa.* They (the censors) had also the supervision and power of inspection of all sorts of medicines, and of deciding upon their fitness for use by the said physicians, &c.* They had likewise the power of punishing the said physicians offending in the premises, by fines, amerciaments, imprisonment of their bodies, and other reasonable and proper means.*

From the exposition which we have already given, and now give, of this charter, confirmed in all its parts by the Act of 14 Hen. VIII., it will appear that the *only* penalty which the college can inflict upon those who merely *practise* without a licence in London, or within seven miles round the same, is a *fine* of one hundred shillings a month, and that the punishment by *imprisonment* applies to those only who practise *badly, or ignorantly* (*malapraxis*), "pro *delictis suis* in *non bene* exequendo, faciendo, et utendo illa."

This power in the charter does not enable the censors to enter the shops, &c., of the apothecaries, for the purpose of examining their drugs, nor of punishing these "medicasters," when found out, for selling drugs of improper quality; for the penalty just described applies only to the *malapraxis* of the *physicians.* It was, therefore, necessary to apply for additional powers to enable the college to suppress the evil attending the sale and use of improper drugs; which appears to have been a very crying evil in those days, as it is in the present: consequently, an Act of Parliament was obtained in the 32nd Hen. VIII., which not only confirms the power of appointment of censors, but also compels these censors, under a penalty of forty shillings, to accept the office, when appointed, and "to search and view once in the year," or "as often as they shall think meet and convenient," the houses of all apothecaries "*within the said city*" of London, and to burn, or otherwise destroy, all "drugs, wares, stuffs," &c., as "they shall then find defective, corrupted, and not meet nor convenient to be administered in any medicines for the health of man's body," "the same four persons (censors) calling to them the wardens of the said Mystery of Apothecaries within the said city, or one of them."

I suppose that the wardens did not find it to their interest to interfere with their fraternity and their bad "stuffs, wares," &c., for we find, about ten years after (1 Mary), "that if the said warden or wardens do refuse his or their coming thereunto, forthwith and immediately," &c., "then the said physicians may and shall execute that search and view, and the due punishment of poticaries for any their evil and faulty stuff," &c.; and any person who shall resist such search and view shall forfeit the sum of ten pounds.

It will be observed that the power given to the college by these two Acts applies to

* "Nec non supervisum et scrutinium omnimodarum medicinarum et earum receptionis' per dictos medicos, seu aliquem eorum hujus modi ligeis nostris pro earum infirmitatibus curandis et sanandis, dandis, imponendis, et utendis, quoties et quando opus fuerit pro commodo et utilitate eorundem ligeorum nostrorum."

* "Ita quod punitio hujusmodi *medicorum* utentium dicta facultate medicinæ, sic in præmissis delinquent' per fines, americamenta, et imprisonamenta corpor' suor'," &c.

the City of London *only*, so far as the searching, &c., of apothecaries' shops is concerned, and I am not aware that their power, in that respect, has ever extended beyond that limit.

But there is one subject of great importance connected with the Act of 32 Hen. VIII., which is, that *it*, as well as the Act of the third year of the same monarch, *declares the science of physic to include the knowledge of surgery*.

Sec. III. "And forasmuch as the science of physic doth comprehend, include, and contain a knowledge of surgery, as a special member and part of the same, therefore be it enacted, That any of the said Company or Fellowship of Physicians, being able, chosen, and admitted by the said president and fellowship of physicians, may, from time to time, as well within the City of London, as elsewhere, within the realm, practise and exercise the said science of physic in all and every his members and parts, any Act, statute, or provision made to the contrary notwithstanding."

Although the above clause applies only to the *fellows*, still it exhibits a great contrast between the opinions of those eminent and strong-minded men who gave the first move to the government of the college, and their degenerate descendants who ruled over it two or three hundred years later. Nay, we find, within a hundred years of the establishment of the college, that, although the fellows had no objection to dabble in surgery themselves, when it suited their interest, still they kept the regular professors of that branch of the science, as well as the apothecaries, at arm's length. At the present day it moves one's risible muscles to read some of the old statutes of the college, wherein they fulminate their wrath against the poor "medicasters" and others, who presumed to *study physic* from the prescriptions of the fellows, in order to be able to prescribe afterwards themselves. The physicians, under the penalty of twenty shillings for each offence, were enjoined to manage their scrolls in such a way, that "nihil quicquam *hujusmodi medicastris* suboleat, quo concilio, quâve intentione, aut in quos usus remedia præscribantur." Nevertheless, when we consider the extreme ignorance of the mass of the community in those days, and that the then apothecaries were, if possible, behind the present race of chemists and druggists in their *mediastric* knowledge; also, that the fraternity of chirurgeons at that period were not far more advanced in their department than the apothecaries were in the knowledge of medicine,—we may, in a great measure, pardon the self-importance of the college, whose members were composed of men of the best education in the country.

"Illud ante omnia scire convenit, quod omnes medicinæ partes innexæ sunt, ut ex toto separari non possint," says Celsus; so, also, thought and practised Hippocrates. It is likewise evident, from the foregoing exposition of the early laws relating to the college, that the physicians of those days agreed in opinion, in that respect, with the most eminent professors of ancient times. But it is right that the public should know that the college has, of late years, modified its views in regard to this subject, and that the grant of its diploma at present is in no way conditional upon the candidate's relinquishing the surgical branch of the profession.

I have already alluded to the Act of 1 Mary; but a short time before this (34 Hen. VIII.), an extraordinary law was passed, which not only went to prove the extreme ignorance, even of *legislators*, in those days, but which also tended to cast no small reflection upon the then race of surgeons. I only mention this law at present, in connection with the College of Physicians, inasmuch as it encroached, in a small measure, upon its privileges; but, as the 1st of Mary afterwards confirms the whole of the 14 Hen. VIII., the *encroachment* upon the rights of physicians is thereby removed.

The object of the 1st of Mary, besides confirming the original Act (14 Hen. VIII.), was to enlarge and strengthen the power of the college in "correcting and punishing all offenders and transgressors in the said faculty," &c., and "for the better execution and view of poticary wares, drugs," &c. The powers conferred by this law are very great and stringent, but, doubtless, not more so than the necessity of the period required. The cry of those who are duly qualified according to law, has always been, and still is, that they are not protected against pretenders and empirics in the profession. It must be admitted, to the great honour and credit of the College of Physicians, that that body did labour most energetically in suppressing quackery about the time of which we are speaking, and the consequence was that the profession of medicine improved rapidly in respectability, rank, and power in this country, where, before its incorporation, it had been far behind what it then was in most countries on the continent of Europe.

It is well known that the Archbishop of Canterbury has, in some instances, taken upon himself to create physicians. The supposed authority of his Grace to grant licences is founded upon the 25th Hen. VIII., c. 21, intituled "The Act concerning Peterpence and Dispensations." The fourth section enacts "That the said Archbishop, and his successors, after good and due examination by them had of the causes and qualities of the persons procuring for licences, dispensations, compositions, faculties, delegacies, rescripts, instruments, or other writings, shall have full power and authority by themselves, or by their sufficient and substantial commissary or deputy, by their discretions, from time to time, to grant and dispose, by

an instrument under the name and seal of the said Archbishop, as well to any of your subjects as to the subjects of your heirs and successors, all manner licences, dispensations, &c., for any such cause or matter, whereof heretofore such licences, dipensations, &c., *have been accustomed to be had at the see of Rome*, or by the authority thereof, or of any prelate of this realm."

In the first place I may remark, that the Pope *never had* the power or "authority," as far as anything is known, of granting licences for *practising medicine* in this country. The authority given to the "prelates" of England to grant such licences was not founded upon *prescription*, but upon an *Act of Parliament*, then of very recent date, namely, the 3rd Hen. VIII. This authority they did not retain more than *eleven years*, because the Act of 14th of the same monarch superseded that of the 3rd year of his reign. The Act of the 14th, as has been already often remarked, says, "That no person from henceforth be suffered to exercise or practise physick through England until such time as he be examined in London by the said President and three of the said Elects," &c. So that, in fact, all the power or authority which the prelates might have previously possessed, either by prescription, by custom, or by Act of Parliament, was taken away from them by this Act of the 14th of Henry, which law has never since been repealed. Nay, it was confirmed by the 1st of Mary, *subsequently* to the passing of the 25th Hen. VIII.,—the Act which has been supposed to confer on the Archbishop the power of granting licences in medicine.

It is right, however, to mention, that the "Act concerning Peter-pence and Dispensations" was repealed by the 1st and 2nd of *Philip* and *Mary*, and again *re*-enacted to its full extent by the 1st *Elizabeth*, c. 1; so that, in point of fact, whatever power the Act originally conferred on the Archbishop of Canterbury of granting licences, &c., was confirmed by an Act (1st *Eliz.*) passed *subsequently* to the Act (1st *Mary*) which confirms the power of the college and the two universities as the sole authorities of licensing physicians.

But, in truth, it is straining an Act of Parliament most marvellously to construe any part of "the Act concerning Peter-pence and Dispensations" to apply to the granting of *secular* licences. The whole bearing and intention of it relates solely to spiritual and ecclesiastical things, as is clearly shown by the preamble. It is, in a word, an Act for abolishing the exactions and the interference of the Pope in ecclesiatical affairs in this kingdom, and for transferring the necessary Spiritualities from the see of Rome to the see of Canterbury.

As a further proof, if it were necessary, that the Legislature does not acknowledge any such authority on the part of the Archbishop, the Apothecaries' Act (55th Geo. III.) imposes a penalty on any apothecary who refuses to dispense to the prescription of "any physician *lawfully licensed* to practise physic by the *President and Commonalty of the Faculty of Physic in London*, or by *either of the two universities of Oxford or Cambridge*.

In conclusion, it may be affirmed, most positively, that no person, or body of persons, has or have any right or authority, according to law, to grant a diploma or licence to enable any person to practise as a physician in England, except the College of Physicians of London, and the two universities of Oxford and Cambridge.

The College of Physicians has had many difficulties to contend with in the course of its history. The principal ones have been those arising from the attempt of its own licentiates to force themselves into the fellowship. It has been decided repeatedly that the licentiateship gives no necessary claim to the fellowship, and that the college had an undoubted right to form its own regulations with regard to admission, provided its by-laws be reasonable, and in accordance with the laws of the land. The decision, in most of the cases in dispute, was grounded upon the fact, that persons having accepted a licence under the by-laws of the college (which the college had a right to make) "ought not afterwards to desert it, and treat it as null and void, and set up a right of admission under the charter, upon the foundation of this very licence which they had accepted under the by-law, upon the supposition that the by-law was a bad one." It appears, in fact, that even graduates of Oxford and Cambridge cannot claim admission into the fellowship as a right. They may claim an examination for that purpose, in the same manner as any one who has the requisite qualification may claim an examination for the licentiateship, but the power of admission rests in the breast of the college itself.

When we compare the College of Physicians with the other medical corporations, it cannot be denied that both its constitution and practice are much more open and liberal than theirs are. Its charter embraced all persons resident in the metropolitan district who were *duly qualified* at that period, and its affairs have ever since been managed by a considerable proportion of those of the same faculty. But, however well adapted it may have been to times past, it is certain that its constitution must be much modified in order to render it suitable to the present period. The changes which have taken place of late in the representative system, parliamentary and municipal, have rendered other changes necessary; all corporate bodies must, therefore, be made to undergo similar modifications. The representative principle must be more abundantly infused into them

before they can become acceptable to the public or adapted to the present age.

The college has been censured of late for conferring its diploma on extra-licentiates. This must appear odd to those who are acquainted with the law. The fact is, that the college could not, if it wished, refuse granting it; at any rate it could not refuse admitting candidates to an examination for it, without rendering itself liable to a *mandamus* from the Court of Queen's Bench. It is the only legal licence it *can* grant to country physicians; because, as I said before, the London licence does not authorise any one to practise beyond seven miles of the city. The college has been bound by the same law for above *three hundred years*. *Why* it should be censured for granting the one diploma more than the other, perhaps those who cavil at it will be able to explain: both are conferred by the authority of the same Act of Parliament. Whether the metropolitan licentiate trespasses the oftener on the ground of the rural physician, or *vice versa*, I do not know; but it appears to me that the college does all it can in the case, namely, *it requires the same qualification for both licences*. Whether that signed by the *Elects*, or that signed by the *Censors*, be the more honourable, if there be any difference between them in that respect, every one is at liberty to form his own opinion; and whether the examination for the one, that for the other, be the more efficient, must be left to be determined by those who have witnessed *both*.

The qualification demanded by the college for its diploma, according to the regulations of 1838, is one of the highest, taken altogether, required by any college or university in Great Britain. I understand, also, that the examinations are such as to afford a very fair test of the candidate's ability and learning. The candidate must be twenty-six years of age at least; he must have devoted five years at least to the study of medicine, three of which must be spent at a hospital containing not less than one hundred beds; and he must produce certificates of attendance on lectures, &c., in every branch of medicine, and in many of the collateral sciences.

SCRUTATOR.

March 10, 1843.

RECOVERY FROM APOPLEXY WITH TOTAL LOSS OF INTELLIGENCE AND SENSATION.

A MAN, seventy-three years of age, and of a naturally strong constitution, entered in November of last year under the care of M. Cruveilhier, at the Hôpital La Charité in Paris. On the day previous to his admittance he had been attacked for the first time in his life by a fit of apoplexy, which caused him to stagger and fall as if intoxicated. Before this he had always enjoyed good health. He was now copiously bled; but on the following day he presented the condition about to be described. He lay on his back, apparently incapable of understanding any questions put to him, for to these he returned no answer, though he kept muttering from time to time as if talking to himself. Hemiplegia of the right side was present, with abolition (except as to the face) of both motion and sensation. Occasionally, indeed, some vestige of motor power was visible in the extremities of the right side; but this was evidently independent of the will. These limbs were insensible to pinching, and the only mechanical irritation which seemed in the least degree to excite perception in the patient has a brisk tickling of the sole of the right foot. There was no paralysis of motion in the face, but sensation was absent there on both sides. Hearing was abolished, and sight nearly so; the pupils of the eyes were incapable of contraction. Taste and smell were greatly enfeebled, if not wholly suspended. The urine was excreted involuntarily, but no stools had been passed since the patient's entrance into the hospital. Respiration was easy, but feebler in the right than in the left lung; pulse slower than natural, and there were occasional intermissions of the heart's action. Ordered, six leeches over each mastoid process, and two ounces of castor oil.

On the 19th inst., two days afterwards, there was little change in the patient's condition, except that he persisted in a state of torpor, from which it was difficult to rouse him, even for a few seconds. Ordered cupping along the vertebral column.

20 to 23. A little improvement; less obtuseness of sensation, but the dejections are still involuntary. Bleeding to eight ounces on the 23rd.

25. Decided amendment; hearing and intelligence partly recovered. The patient answers questions after repeating them over to himself several times. Sensation and motion restored in a small degree. Ordered an ounce of castor oil.

The amendment continued, and by the 28th the patient had begun to execute several voluntary movements, and to pronounce several words, which he repeated frequently. He expressed a desire to eat, and was allowed some solid food.

The cure from this time progressed without hindrance. By the 6th of December motion had become re-established on the side previously paralysed. Intelligence was, however, slow in returning; the patient seemed to have lost the memory for words, and could not, unassisted, call objects by their names, though on the first syllable being pronounced by another person he would finish the word. On the 17th he

could, though still feebly, grasp objects with his right hand. Sensation, hearing, sight, and smell, were in a great part recovered, and speech had become tolerably perfect. Convalescence was proceeding at the time of the report.—*Gaz. des Hop.*, Jan. 17.

GUILDFORD UNION.

To the Editor of THE LANCET.

SIR,—The table below shows the number of parishes, area in acres, and population, with the number of cases that received medical and surgical assistance, including midwifery, in each district, as published by the board of the Guildford Union, from Dec. 25, 1841, to Dec. 24, 1842, with the amount of salary to each district for the last and present year.

The account is sent to show that, by lowering the salaries of the different districts, the board of guardians are desirous that very little, if any, benefit shall be derived from the new regulations of the poor-law commissioners dated the 12th of March, 1842, which are now to come into operation in this union. Fifteen shillings are to be allowed for midwifery cases, in addition to those specified in the tenth article of the order. It was generally believed that the new regulations were intended as a reward for the trouble necessary in all surgical operations and accidents. Can you, Sir, explain to your numerous readers the reason of such delusion? I remain, Sir, your obedient servant,

A CONSTANT READER.

March 12, 1843.

Districts.	Parishes.	Area in Acres.	Population.	No. of Cases.	Salary. 1842	Salary. 1843.
House at Guildford.			300 to 350	198	40*l*	50*l*
1st.	Artington St. Nicholas....	2860	1579	241		
	St. Mary, } Guildford .	210	1676	321		
	Holy Trinity, }		1506	129		
	Stoke.....	2410	2050	341		
	Mirrow.....	1640	252	41		
	Wanborough.....	1540	171	50		
	Total.....	8680	7234	1123	70*l*	65*l*
2nd.	Godalming.....	8470	4328	702		
	Compton.....	1790	522	94		
	Total.....	10,260	4850	796	102*l*	85*l*
3rd.	Albury.....	4920	1079	146		
	Shere.....	3900	1347	189		
	Total.....	8820	2426	335	65*l*	55*l*
4th.	Clandon, East.....	1430	293	28		
	Clandon, West.....	991	307	54		
	Horsley, East.....	1740	300	40		
	Horsley, West.....	3000	671	56		
	Total.....	7161	1671	178	48*l*	45*l*
5th.	Ockham.....	2310	640	33		
	Wisley.....	1170	155	20		
	Send and Ripley.....	5680	1538	111		
	Total.....	9160	2333	164	55*l*	50*l*
6th.	Woking.....	8190	2482	253	70*l*	60*l*
7th.	Dorplesdon.....	7140	1424	311		
	Perbright.....	5050	657	140		
	Total.....	12,190	2081	451	50*l*	45*l*

THE LANCET.

London, Saturday, April 1, 1843.

HAVING recently demonstrated that man should be regarded and studied by the medical practitioner as a complex being, made up of mind and body, we now follow up the subject by remarking that the medical practitioner, in prosecuting his researches in anthropology, should not forget that he is *himself* a complex being, and has two very distinct classes of faculties *at his command*, each of which must be assiduously cultivated and actively used in order to fit him for the study of man in the state of health or disease.

It is natural enough to suppose that a person who possesses a powerful intellect, and a large range of general and medical knowledge, must necessarily be a good practitioner of the healing art. Yet that supposition would be extremely erroneous. Such a man, with all his powers of mind, and all his attainments, might prove a very indifferent practitioner, and might be far surpassed at the bed-side of a patient by one who possessed less intellect and smaller information, but who was endowed with a quicker ability of using his external senses, and greater powers of *observation*. In fact, it is the acuteness of the æsthetic powers, in other words, of those powers which arise immediately from the exercise of the external senses, which confers on some men a remarkable tact in the diagnosis and treatment of disease, and gives them a decided, although, apparently, an unaccountable ascendancy, as practitioners, over others, to whom, in the aggregate of their faculties and attainments, they may be manifestly inferior. This rapidity of perception and observation must, doubtless, be backed by sufficient knowledge and judgment, in order to form a good practitioner; but the fact that a high development of the æsthetic powers will greatly extend the application of a certain amount of knowledge, and impart to a given weight of judgment a greatly increased efficiency, abundantly evinces the importance, to the medical practitioner, of acquiring a correct and subtle use of his external senses. And, as we lately endeavoured to impress upon our readers the necessity of studying the abstract powers of the mind, we would now insist on the equal necessity of cultivating those powers through which the mind holds converse with the material world.

The advantages of an acute exercise of the perceptive powers, although strikingly exemplified in the practice of many eminent men, have, in general, been little inculcated by medical writers and teachers. We hear, indeed, of the *tactus eruditus*, and the use of the ear in auscultation is now universally admitted as an important aid to diagnosis; the *decubitus*, also, and a few other points relating to attitude, are commented upon by medical writers. But there is a peculiar learning belonging to the *eye* and *ear* which claims the most careful attention, although hitherto but little appreciated. It is well known how skilfully some men can "find the mind's construction in the face," and detect a latent meaning in the simplest gesture or the slightest variety of intonation. This constitutes *physiognomy*, in the widest sense of the term, and every observant person must know that physiognomy has a foundation in nature, though LAVATER and others did not succeed in reducing it to a science. But has *disease* no physiognomy? Do morbid actions imprint on the countenance no marks, and communicate to the voice, gesture, and manner, no peculiarities by which the practised eye and ear may detect the presence of those morbid actions, and trace their changes and transitions? Assuredly disease *has* a physiognomy, and happy is the practitioner who is gifted with the power of discerning those minute shades of expression which are inappreciable to obtuse senses; for in this very power resides a great part of that almost magical precision in diagnosis and prognosis by

which some individuals have been so remarkably distinguished. The reality of medical physiognomy cannot be better illustrated than by a very common example,—that of an affectionate mother watching her sick child, in which case, excited feelings and fixed attention give an acuteness to the perceptions that more than supplies the place of scientific culture. How often do we hear a mother, so circumstanced, declare that her child is better or worse, although we can, at the time, perceive no change in the symptoms? Yet the mother is almost invariably correct in her prognosis, and a change in the symptoms speedily follows.

The study of medical physiognomy is, for several reasons, one of extreme difficulty. First, because the greater part of mankind are probably not endowed by nature with æsthetic powers susceptible of the requisite degree of cultivation; secondly, because the finest senses are liable, perhaps the most liable, to be led astray by fancy; and as the most skilful microscopical observers occasionally see that which is invisible, and the most skilful stethoscopists full often hear that which is inaudible, so the most acute medical physiognomist is apt to be misled by the like *ignes fatui* of the fancy, and the study is one in which a very strict guard should be kept upon that treacherous faculty; thirdly, because if an individual attain a high degree of skill in medical physiognomy, that skill is, in a very small degree, communicable to others—the delicate, though vivid impressions of which his own highly cultivated senses render him susceptible, being, for the most part, incapable of explanation in language. Hence knowledge on such a subject can never become cumulative to a great extent, and each individual has little to draw upon excepting his own powers of original observation. The general outlines of the subject, however, admit of being traced in a manner intelligible to all, and it is much to be regretted that the physiognomy of disease is not generally recognised and taught as part of the study of practical medicine. Here, as in many other instances, the penetrating mind and vast genius of HIPPOCRATES have anticipated a more advanced era of medicine than we have even yet arrived at. His celebrated description of the countenance of approaching death is familiarly known; throughout his writings we find evidences that his external senses were constantly vigilant to aid his diagnosis and prognosis, and a greater number of physiognomical observations on disease are to be found in his works than in those of any succeeding author; although it should be remarked of the ancient Greek physicians generally, that they cultivated the æsthetic powers with reference to medicine much more diligently than the moderns, and that semeiology was consequently in a more advanced state among them, proportionally to the other branches of medical science.

BY recent arrivals we hear from India that "all the old Boards, and their adherents and abettors, are furious" against us; but that, on the other hand, "all those, the large "majority, who would found their advance-"ment on their own characters and exertions," are with us. With this result we are quite satisfied. It is just what we had anticipated, and we augur well of the manly feeling evinced by our large majority in the Indian services.

We have, of late, exhibited so many and such glaring proofs of incapacity, administrative and scientific, on the part of the Indian Medical Boards, that what we would now add, by way of concluding remark, is more in pity than reproof. If the gentlemen of the Boards will only accept the "boon," or pension for length of service, and retire into stations befitting their age, they shall have the best wishes of the medical community for long lives of ease and happiness. But if, on the contrary, they will retain public and responsible offices, after the natural decay of the senses and faculties, they must expect to be reminded of their folly and bad taste.

The type or character of mind of the old Indian is pre-eminently objective. Just in proportion to his personal enfeeblement does he appear to be clever, even at fault-finding. The man who, of himself, never can originate or carry out any useful measure, will, never-

theless, object to and find fault with everything, however excellent, that is propounded by another. Such a man is a public and private nuisance; in point of fact, he can be right only when all other men are wrong.

This miserable condition, the objective state of mind, ascribed peculiarly to the old Indian, was carried to its climax by Colonels SHELTON and PALMER, while prisoners at Caubul. They actually *objected* to a plan framed to rescue them from perpetual bondage, "lest they should implicate themselves with MAHOMED AKBUR KHAN;" in other words, with the very man who, contrary to the faith of every solemn engagement, religious and moral, was driving them, like sheep, into the slave-markets of Toorkistan; and though, as the gallant Major POTTINGER truly asserts, "in no other way could the release of our captives have been achieved." This is the climax of that unhappy state of irresolution, feebleness, and unfitness for direct and vigorous action, the degeneracy in moral courage, which too often characterises the old Indian. It is the result of climate, of "the slow blight of the constitutional power." There is no help for it. It can only be pitied, and recommended to be escaped from by an early return to the bracing atmosphere of home.

Colonel SHELTON was the very phœnix of objectors. Nothing vigorous, wise, or good, it is said, was ever proposed during the disturbances in Caubul that his unhappy mind did not object to. If, then, such be the occasional effect of climate on some persons of comparatively short, or of an average, residence in India, what must be the inevitable moral standard of a "Board" constituted as Mr. MARTIN tells us that of Bengal generally is, viz., of men of forty years service? Let us hope that Lord ELLENBOROUGH, now that he has time to look about him, will sweep away this worse than useless burthen to the medical department of the army, a disgrace alike to the age and to science.

MEDICAL REFORM.

(From a Correspondent.)

WE have much pleasure in recommending to the immediate notice of our readers a second letter on Medical Reform from Sir JAMES CLARK, addressed to the SECRETARY OF STATE for the Home Department. It is as much to the purpose as its predecessor, and the subject could not have been taken up with a more vigorous grasp of mind, or expounded in more lucid or appropriate language. Its principal aim is to demonstrate that the only sound basis of medical reform is the improved education of the *general practitioner*, and that not the least important part of such education consists in the studies preliminary to that of medicine. The preliminary education is not one jot less indispensable than the medical. Even though the Legislature were to devote six whole sessions to the exclusive object of medical reform, that object would never be attained until some means were devised of securing to the profession highly-educated men and gentlemen.

What is the actual state of medical education? Let the question be answered in the memorable words of Mr. GEORGE JAMES GUTHRIE:—

"I regret to say that among the students who entered the profession some years back, and are only *now* presenting themselves for examination under the regulations of 1836, there are many who cannot spell very common words in their native language."

This announcement was made by Mr. GUTHRIE in the October of last year; and truly not all that has ever been said in this Journal against the Council of the College of Surgeons amounts to a more bitter reflection than is here cast upon them by one of their own body.

Mr. GUTHRIE, it seems, "regrets," and the rest of the Council, doubtless, regret, with equal sincerity, that they have received at the examinations for the diploma in surgery a set of lubbers who cannot spell their mother tongue. If they "regret" it, why, in the name of orthography, did they ever lead such candidates to suppose that they had a good chance at the College of becoming legally qualified surgeons? Away with such hypocritical "regrets." The truth is that the Council of the College rejoice with all their hearts in a defective education on the part of members, because they well know that defective education and the abasement of mind and spirit resulting from it, is likely to keep them in the condition of what Sir BENJAMIN BRODIE candidly termed the "subordinates" of the profession. Had the members of the College at large possessed a freer spirit, the Council would long ago have found themselves in a position that was calculated to inspire them with much more real

"regret" than the inability of the "subordinates" to spell even their own names. Let the comprehensive and enlightened views of medical education, promulgated by Sir James Clark, be adopted and acted upon, and the present corporations will die of their own absurdity, without the possibility of anything similar to them ever again arising.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 14th, 1843.

Edward Stanley, Esq., F.R.S., President.

There was a very full attendance of members this evening on the occasion of the new president's taking the chair.

Mr. Stanley briefly addressed the society, returning thanks for the honour of having been elected president at a period when the society was in a more flourishing condition than ever previously. It comprised seven hundred fellows, its library contained sixteen thousand volumes, and its discussions had never been surpassed in interest. The success of the society was remarkable considering that a connection with it imparted neither distinction nor reward save such as resulted from the successful cultivation of medical science. But these were valuable advantages, and, in addition, the society served to promote kind and social feelings among members of the medical profession. The President alluded to the twenty-five volumes of the "Transactions" already published, as most valuable records, and such of which any society might justly be proud. After the compliments to his predecessors usual upon such occasions, Mr. Stanley resumed his seat.

Some Account of an Hysterical Affection of the Vocal Apparatus. By Oscar M. P. Clayton, Esq.

The author prefaced the detail of his paper by drawing attention to the too frequent generalisation in the treatment of hysterical affections, which he supposed to arise chiefly from hysterical disease being confounded with diseases occurring in an hysterical diathesis.

The cases, sixteen in number, occurred in two groups, the first beginning in February, 1841, accompanied by well-marked pyrexial symptoms, the second in October last, in which the symptoms were clearly hysterical and mutative from the first. They occurred in a charitable institution for the maintenance of female children; those attacked were from eleven to fourteen years of age.

In February, 1841, seven of the children were attacked, as follows:—a short, hacking cough, almost constant; much pain and distress in breathing; no expectoration; pulse quick; hot skin; tongue white; bowels costive. After two or three weeks, during which time these symptoms withstood all the remedies applied, the cough changed to sounds, varying in the different patients, in some resembling the double action of a large saw, in another a shrill, screaming expiration followed a quick, catching, expiratory effort; in another the sound was similar to that produced by blowing into a small metallic tube. "In fact," says the author, "it was difficult to conceive the dissonance and constancy of these sounds."

Besides these, one girl, aged fourteen, became affected with symptoms exactly resembling those of laryngitis, and requiring the usual means for their removal; but after a week or two the noise above alluded to supervened. In the commencement, sinapisms, blisters, expectorants, and nauseants, were tried in various forms. Sedatives alone, and then combined with antispasmodics, were also given without effect. When the anomalous sounds were established, a combination of hemlock, sulphate of quinine, and sulphate of zinc, was resorted to, as also full doses of sesquioxide of iron. These remedies were quite ineffectual until the children were separated from each other, and then, with the exception of two, who were sent home, they all recovered; but for a long time it was found necessary to exhibit mineral tonics to remove the very considerable debility that remained.

In the second group, commencing in October last, the double sounds, *i. e.*, the inspiratory and expiratory, succeeded almost immediately to the hacking cough, and there were some catarrhal symptoms. On the whole the hysterical symptoms were well marked. A considerable number of children were on this occasion attacked, amongst whom were many of those who had been formerly affected. The uproar produced by the sounds became alarming to the neighbourhood. A variety of medicines, including turpentine, spiritus ammoniæ succinatus, antispasmodics, mineral and vegetable tonics, and the regular and continued use of the shower-bath, availed nothing. The author now determined to try the effect of mental influence upon them, and, following the example of Boerhaave, he assembled the children, and informed them that he should, with a red-hot iron, burn the throats of all those who were not well the following morning. The next day, however, they all, with the exception of two, ran away, and on being collected the day after that were all well; while in the two that had remained at the school the symptoms persisted. At the end of a week the symptoms again manifested themselves in all the children, and now their throats were blistered with a spatula, heated in boiling water, and covered with a silk handkerchief. This in some cases

succeeded. In two others, who were secluded from the rest, the affection gradually wore itself out; and two more were cured by being separated from their noisy companions.

Dr. MAYO referred to that class of remedies in this disease which acted through the influence of the imagination, exciting fear and apprehension in the patient, and remarked that these remedies were only beneficial by imparting power to the patient to do those things which he could not otherwise have effected. Such were cold affusion, and similar means of treatment. He suggested that the word "imitation" should be superseded by "sympathy," which more properly explained the similar affection of some persons who saw others labouring under the effects of hysteria. He had never seen such marked cases of hysterical affection of the vocal apparatus as those detailed by the author; but he recollected a case of "male hysteria," if such a term were admissible, which in some respects was similar to Mr. Clayton's cases, and which occurred in the Marylebone Infirmary. The man was admitted there for what appeared to be pulmonary disease. He was subject to paroxysms of severe cough, alternating with sickness. It was remarkable that when the pulmonary symptoms were most severe, and the cough and pain worst, auscultation over any part of the thorax failed to detect any respiratory sound; at all other times the breathing was quite free. Percussion of the chest elicited a clear sound. This patient was cured by tonics and antispasmodics. Was this peculiarity in the breathing noticed in Mr. Clayton's cases?

Mr. CLAYTON replied, that during the paroxysms it was probable that the noise of the coughing might have interfered with the attempts to listen to the sounds of the chest, but during the paroxysms the respiratory murmur was deficient. Percussion was clear.

Case of Erectile Tumour in the Popliteal Space, and its Removal. By ROBERT LISTON, Esq., F.R.S.

The patient was a stout, healthy-looking lad, ten years of age. He had a tumour in the right ham, of an oval shape, about three and a half inches in its long diameter, unattached to the skin and unattended with pain. It had a doughy, elastic feel, giving a sensation, when the limb was extended, almost exactly resembling fluctuation produced by deeply-seated matter. When the limb was flexed this sensation was less perceptible, and it had more the feel of an elastic solid tumour, which was moveable, and could be distinctly raised from the bone. The tumour first attracted attention when the patient was about two years of age. In the course of a year it had increased in size, so as to be nearly as large as a turkey's egg. Being punctured at this time with a grooved needle no fluid escaped. It slowly increased, without occasioning pain or inconvenience, and three years ago a surgeon passed a seton through it. This was withdrawn in a few days, when a discharge had been established. No benefit was gained by this proceeding, or by other means adopted to reduce its size. The operation for its removal was performed January 6th. An exploratory puncture with a bistoury was first made into the centre of the tumour. This was followed by a profuse discharge of blood, and the swelling somewhat diminished in size. Its surface was next exposed, by dividing the skin and fascia; and it was now observed that it had the aspect of a fatty tumour, and was evidently much less in its dimensions than before the operation. As the operation was proceeded with the tumour continued to decrease in size. It was found that the substance of which it was composed was covered by the fibres of the semi-membranosus muscle, and to extirpate it it was necessary to cut into that muscle. In the course of the operation the tumour had to be followed deeply into the popliteal space, and a good deal of blood was lost. Only one vessel required ligature. The wound healed favourably, and the boy was able to walk about the ward on the sixteenth day from the operation. On making a section of the tumour it was found to consist of a mass, about the size of a hen's egg, of most perfect erectile tissue. On microscopic examination an appearance was visible like that of the musculi pectinati of the heart; the columns of the reticulated structure being covered with a smooth membrane, resembling that lining the inner surface of the veins. The author adds some observations on the circumstances which were peculiar in the case, directing attention especially to the difficulties occasioned in the operation, by the tumour being covered on all sides by muscular fibres, and by the diminution which occurred in its size as he proceeded. He closes his remarks by offering his opinion, that the tumour was developed in the substance of the muscles with which it was connected. Another case is appended, in which the author removed a tumour of a different structure from the side of the neck, and where he was of opinion that the morbid substance originated in the interior of the sterno-cleido-mastoid muscle. In this case there was great hæmorrhage.

Mr. LAWRENCE remarked that the first case mentioned by Mr. Liston, of erectile tissue occurring in the substance of a muscle, was a form of disease very rarely met with. He had seen one instance, however, of a similar kind, in the operation for the removal of which he had been assisted by the President. The patient was a child about three years old, the daughter of a physician, and

was affected with a tumour apparently over the centre of the deltoid muscle. Various applications had been tried for the purpose of getting rid of it, but without any good result. When the patient was brought under his notice he found the tumour of an indolent character, not well defined, and apparently quite loose under the integuments. As it was increasing somewhat in size, he resolved to extirpate it by the knife. On dividing the integuments, he expected to find a loose tumour, but his surprise was great to observe that the swelling appeared to be part of the deltoid muscle, and had no defined boundaries. He was at a loss in what manner to proceed, and obtained the co-operation of Mr. Stanley. On proceeding with the operation it was found that the tumour, which consisted of a congeries of vascular ramifications, could not be entirely taken out without removing a portion of the muscle with it. This was accomplished with the loss of a considerable quantity of blood, and when removed, the distinct firm swelling was reduced to a very small bulk, and only the enlarged vessels were visible. The edges of the incision united, the cicatrix remained sound, and the child, at a period of several years since the operation, now remained quite well. He had, also, some time since, met with a somewhat similar tumour in the ham in a gentleman forty or fifty years of age. About eight months before applying to him he had travelled a long distance outside of a stage coach, in the front of which he sat. The iron edge of the seat pressed on the ham, causing pain at the time, and both pain and swelling afterwards. Leeches, cold lotions, and other applications, were used, but the swelling continued to increase, and remained very painful. The tumour when he (Mr. L.) first saw it, was as large as the fist, seemed to be deeply seated, and was tolerably moveable. The general health of the patient was deteriorated by the suffering which he had undergone; and on hearing the history of the case, and the means which had been ineffectually used for the removal of the tumour, he (Mr. L.) suggested that it should be cut out. The operation could be performed with perfect safety. On dissecting down to the tumour he could not clearly detect its boundaries; it appeared to consist of a congeries of large veins, and it became necessary, in order entirely to remove the tumour, to take away portions of the muscles with it. This was done, and the hæmorrhage was very great. The sides of the wound were brought together, covered with plaster, and compressed by a bandage. The patient went on favourably, got relief and sleep from the removal of the tumour, and the wound healed, with the exception of a small opening, from which there was a considerable discharge. The tumour again formed, but was not now confined to the ham; it extended up the thigh and down the leg. The constitutional symptoms, loss of rest, &c., again made head, and the patient was anxious that something further should be attempted to relieve him. Mr. L. advised that no operation should be performed, the result of the first having been so discouraging, nor had he any other remedy to propose. The patient, however, urgently requested that the operation might be performed, and it was accordingly. An incision was made extending from the middle of the thigh to the middle of the calf of the leg. Portions of the biceps were taken away with difficulty, during the operation, together with portions of medullary-looking, yet not soft, deposit, and which contained muscular fibres, as if the matter had been adherent to muscle, and large vessels ramified all around the tumour. The patient recovered, and lived three years after the operation, but in bad health, and died at the expiration of that time of disease of one of the internal organs. The first of these tumours was formed of erectile tissue, the second was not so.

Mr. Liston could enumerate various cases of tumours in the popliteal space, similar to that detailed by Mr. Lawrence, but these bore no similarity to the one he had brought before the society. In one instance the tumour involved the posterior tibial nerve, three inches of which were removed without producing paralysis either of sensation or motion! The wound healed, but the disease returned at the expiration of six months in the form of a tumour in the thigh, and also of the crural nerve. He did not interfere on this occasion. The patient afterwards died of malignant disease.

Mr. Charles Hawkins said he would take the liberty of relating a case to the society very similar to the *second* described in the paper just read. The acquaintance with such another, Mr. Liston said he was far from courting; he could quite understand what was meant by that observation, from what he had witnessed in the following case. In the commencement of the present winter he had had the opportunity of seeing Sir Benjamin Brodie remove a tumour from the neck of a lady, towards the same situation with that described by Mr. Liston. It was of a considerable size, and had been latterly increasing. In the commencement of the operation the *external* jugular was tied and divided. It was then intended to cut across the sterno-cleido-mastoideus, and turn aside the two portions, but that muscle was found to be so intimately connected with the tumour that it could not be detached from it. After some dissection the tumour was found to occupy a much larger space than was at first imagined: it extended from under the angle of the lower jaw to the clavicle, and from the thyroid cartilage backwards towards the spine. When it had been in a great part removed from the sur-

rounding parts, it was found to lay for about three inches on the internal jugular vein and carotid artery, and to be in such close connection with the vein as to render it necessary to tie that vessel, both above and below the tumour, and to divide it, leaving the intermediate portion of vein on the tumour. After much careful and tedious dissection it was removed from its relation with the artery; but before it was quite severed from all the surrounding parts, a most profuse venous hæmorrhage took place, upon which alarming syncope occurred, the surface of the body becoming cold, and the respiration and circulation scarcely perceptible. From this state, in about half an hour, the patient recovered sufficiently to allow of a ligature being applied to the bleeding vessels, which until then had been secured by the hand. The wound was dressed and the patient put to bed. Except a difficulty of swallowing for some time afterwards, and some irritability of the pulse consequent on the loss of blood, Mr. H. believed the patient recovered without any bad symptoms. The tumour removed is in St. George's Hospital museum. Mr. H. thought the case worth relating to the society in connection with Mr. Liston's *second* case, as an example of what severe operations and great loss of blood may be recovered from: in this case the tying both jugular veins, and the unavoidable interference with the carotid artery, added to an operation which necessarily occupied a great length of time. He was not satisfied that the tumour was of a malignant kind; at least, he had seen Sir Benjamin Brodie remove such another from very nearly the same situation in a lady's neck, and very analogous to it in structure, *five years* ago, and in that case there had been as yet no symptom of a return of the disease.

Mr. STANLEY recollected the first case mentioned by Mr. Lawrence. The tumour, when removed, was quite flaccid, and, in fact, nearly collapsed altogether. When cut into it very much resembled a piece of spleen from which the blood had been squeezed out. The presence of nævus in muscular structure was a very rare pathological change. A surgeon might very reasonably expect in these cases to find, on cutting down to the tumour, a fatty or cellular growth, and not be prepared for the remarkable condition of parts which were presented to him.

Mr. BRANSBY COOPER, on one occasion, had seen Mr. Green cut down upon a tumour in the thigh about as large as a pullet's egg. It was deeply seated, and influenced by the motion of the muscle; but on making an incision through the skin and fascia, hardly any tumour was discoverable. It became a question in this case whether it would be better to allow the tumour to remain or to remove a large portion of the rectus with it. The former plan was judged to be the better. The edges of the wound were brought together; the patient did well; and the tumour, during the next six or seven years, did not increase in size. He (Mr. B. Cooper) suggested that a like proceeding might be resorted to in similar cases in which the removal of similar tumours would require the extirpation of important parts.

Mr. MACILWAIN called attention to some other cases of erectile tumour, treated by seton, which he had published in the Society's "Transactions."

MEDICO-BOTANICAL SOCIETY.

THE INDIAN HEMP.

MARCH 22ND.—A communication from Mr. Ley was read this evening (Mr. H. GIBBS in the chair) detailing the results of his experience with the cannabis Indica, or Indian hemp, in the treatment of certain convulsive and inflammatory diseases. One of the most important and interesting of the cases detailed by him was that of a lady who had been confined to the hydrostatic bed for five years from disease of the spine and hip, and in whom, whenever she was removed from the bed for the renewal of the India-rubber sheet covering it, there was produced a disturbance, little felt at the time, but inducing at night a succession of violent spasms of the muscles of the spine, drawing the body back into the form of an arch, and as suddenly relaxing. These spasms would follow each other rapidly through the night, producing faintness, sickness, and insensibility, all through the next day. This alternate state of nocturnal tetanus and daily fainting continued, generally, after each moving, for a fortnight or three weeks, obstinately resisting every medicine that could be applied for its relief. When Mr. Ley obtained possession of some of the resinous extract of hemp, he had pills of one grain weight made, of which he gave his patient six, directing her to take one on the occurrence of the first symptom of the spasm, and to repeat the dose every half-hour until the spasm was relieved, or some other reason offered for their discontinuance. Five pills were taken, when she felt overpowered, the muscles relaxed, and she fell into a profoundly tranquil sleep, likened by her afterwards to a trance, because she was for a long time after she had apparently fallen asleep conscious of passing events, but unable to make known her perceptions. The spasmodic attacks returned for several successive nights, but were not so violent nor of such duration as previously. The opinion of this lady, who, from long illness, is familiarised with medicines, is, that the extract of hemp affects the muscles principally, relieves ordinary pains less surely than opium, disturbs the stomach little, if at all, but produces an unpleasant sensation in the head, not excitement, but objects appear

before the eyes which do not really exist; thus she may see a book so plainly on her bed as to reach out her hand to take it, or she may seem to be holding a newspaper. Mr. Ley has further found the resinous extract of hemp of service in the treatment of acute rheumatism, cholera, chorea, effusion into the knee-joint, housemaid's-knee, enlarged ganglia, &c.

WESTMINSTER MEDICAL SOCIETY.—EPIDEMIC FEVER.—The society was occupied, on the evening of March 18th, chiefly with some accounts, of a desultory character, relating to a low kind of fever at present epidemic in some parts of London. In the parish of St. Giles, in particular, does the disease appear to be very general, and the wards of the Fever Hospital, including those recently erected, are crowded. The chief characteristic of the prevailing malady is its remarkably low type, and the early indication which it exhibits of the necessity for tonics and stimulants. Like other epidemics, its prevailing character is debility. It seems to be of a fatal character.

ANALYSIS OF FATTY MATTER FOUND IN THE OVARIES AND UTERUS.

Dr. GOLDING BIRD, in commenting on a case mentioned at the London Medical Society by Mr. Pilcher, in which an ovary was found enlarged and filled with fatty matter mixed with hair, stated that he had seen several such cases, in one of which two imperfect teeth were found mixed with the fat in the ovary. The fat there found in his as well as Mr. Pilcher's cases, was always yellow and granular, presenting a marked physical resemblance to butter. He referred to a case which occurred lately in Germany, in which an ovary was found so distensible as to weigh fourteen pounds, and completely filled with fat and hair; this fat had been analysed by Professor Brandes, and the result of his examination, as reported in the "Journal fur Pharmacie," showed its close resemblance to butter.

The following is the result of his analysis of the fatty mass, and of the remaining substance of the ovary:—

	Fatty Mass.	Remains of Ovary.
Butyrine, with butyric acid	27	48
Elaine, with traces of margarine	38	
Margarine	24	25
Fibrous mass	2.5	
Degenerated cellular tissue		27
Water	8.5	
	100	100

In all the specimens he had examined Dr. Bird had found the fatty mass to be contained in a single immensely developed cell; and this was evidently the case in the immense ovary weighing fourteen pounds, the analysis of which is given above, as but two and a half per cent. of it consisted of organised matter. In the case of a woman who died at Guy's Hospital, about two years ago, Dr. Bird found the uterus full of this butter-like fat mixed with hair.

There was a point of great physiological interest connected with the nature of this fat, founded on its containing butyrine, and, indeed, being little else than butter. So far as observation has extended, butter appears to be the fat peculiarly intended for the nourishment of the infant, and in a normal condition is alone found in the milk. Something like butyrine has been found in the white matter with which the body of the fœtus is smeared. It is hence probable that the secretion of butter-like fats is peculiarly the province of the organs connected with the function of reproduction. Hence the masses found in the ovary or uterus are not to be regarded as mere fatty degeneration, like the adipose changes often observed in muscles and other tissues, but really merely an enormous and highly disproportionate development of a fat which is normally secreted by these organs, but in very minute quantities.

DRY FEET.

To the Editor.—I am glad to add one small desideratum to the valuable paper on "Dry Feet," at page 898 of THE LANCET, March 18th. It is a blacking that will be received by leather whether damp with oil or water, viz., *linseed oil*, boiled, three parts, *printer's-ink*, one part. I hit upon this preparation some years ago, having had occasion to make many experiments to enable my servant to keep the head and apron of patent leather with which my open carriage is fitted in neat order and good preservation, and the preparation above mentioned succeeded admirably. I was led to try it from reflecting that damp paper took the printer's-ink, in which there is already a portion of boiled linseed oil. I am, Sir, your obedient servant,

W. P.

March 21, 1843.

THE AFFAIR AT BIRMINGHAM.

To the Editor.—As an anxious expectant, every Saturday, of your weekly present, and as a member of an honourable profession, of which, as the Editor of THE LANCET, you, in a great degree, ought to be looked upon as the index, I am *rather* surprised to find in your columns no indignant expression against the proceedings of Mr. Ledsam. What can the public think of a body of men, one of whom can act as Mr. L. has done,

without being scouted, both *extra et "intra muros?"* Here is the simple summing up of the case, after which I leave your readers to judge whether any person or community is, or is not, contaminated by connection with such persons. Mr. L. makes a most truculent attack upon Mr. Wood, of Birmingham, a respectable and clever man; within twenty-three hours he offers to Mr. Wood a most abject and cur-like apology for his conduct; not satisfied with which self-abasement, he betrays to Mr. Wood the private conversation of his friend! And such a friend—the person who, by his talent and high name for honour and fair-dealing, was sufficient to float even an empty pedant!

When the schoolmaster of old ordered the culprit to *unbreech*, as Mr. Wood (acting as the Dominie) has done in the present case, we can well imagine the blubbering heavy-pated urchin praying to be let off with a "Please, Sir, Joe Hodgson bid me do so! Oh, Sir, pray don't; I'll never do it again! It was Joe Hodgson, Sir, please, Sir, not me; oh dear!"

CHIRURGUS.

*** In a private note our correspondent remarks, "You should lay the lash on in this case;" but we are of opinion that when persons expose and lash themselves, others are very fairly relieved from the performance of that disagreeable and irksome task.

CLINICAL REMARKS ON UMBILICAL FISTULA.

THE occurrence of a case of fistula in the umbilical region, giving issue to stercoraceous matter, in a little boy of thirteen years of age, has called forth the following clinical remarks from M. Guersant, Jun., surgeon to the Children's Hospital in Paris, of which the subject was a patient:—

"Dropsy is sometimes seen in children; but most frequently children with swollen abdomens are affected neither with dropsy nor mesenteric tubercles. These two diseases are less frequent in the Children's Hospital (Hopital des Enfans Malades) than might be imagined. What is most frequently found to cause this condition of the abdomen is chronic peritonitis, as in the case before us. Three months since, or about five months after the commencement of the disease, a perforation spontaneously appeared in the umbilical region, which soon gave issue to fæcal and other matters from the small intestine. Their source from this portion of the digestive canal is indubitable; portions of undigested food are frequently found, and the smell of the discharged matters is different from that of the fæces from the large intestine. The stercoraceous discharge through this orifice is increased by pressure on the sides of the abdomen; but notwithstanding this preternatural opening, the intestinal canal below it is still perforate, and the patient daily passes a solid stool per anum. It is obvious that this fistula has resulted from a chronic peritonitis of a local kind, which had produced adhesions between the intestine and the umbilical portion of the peritoneum. Ulceration having been set up was followed by the formation of an aperture. Surgery must, in this case, act very cautiously, and it is doubtful if we can effect the closure of this fistulous opening in a satisfactory manner."— *Gazette des Hôpitaux.*

LEUCORRHŒAL METASTASIS.

DOCTOR OTTANI, of Ravenna, in a paper comprised in one of the Italian medical journals, cites the following case of metastasis of a leucorrhœal flux from the vagina to the umbilical region. A married lady, aged thirty, and the mother of one child, being affected with leucorrhœa, was prescribed the internal use of sulphate of iron, with calomel and hemlock, as an alterative, with injections, per vaginam, of a solution of sulphate of zinc; and by these means the discharge was soon stopped. But some time afterwards the patient experienced a general sensation of restlessness and discomfort, as well as mental depression and melancholy, and shortly after these indications she was seized in the night with acute pain in the hypogastric region, accompanied by nausea and retching; pulse small, wiry, and only occasionally perceptible; eyes surrounded with a livid circle; tongue dry, and sunk in the mouth; thirst intense; skin somewhat cold, and forehead covered with cold glutinous perspiration; and furious delirium. Notwithstanding the acuteness of the abdominal pains, no meteorism was present. The chief remedial agents employed at the time were castor oil and emollient fomentations; but in spite of these the malady continued unabated, and in the morning a dirty yellow matter, similar to the leucorrhœal fluid, began to flow pretty copiously from a considerable number of points immediately around the navel; and this metastatic discharge continued for upwards of a month, at the close of which the patient recovered, simultaneously with the re-establishment of the flux in its original seat.

CONCLUSION OF MM. DANGER AND FLANDIN'S RESEARCHES CONCERNING THE EFFECTS OF ARSENIC ON WOOL-COVERED ANIMALS, &c.

1. THE sheep that survived after taking four drachms of arsenious acid, having been killed on the thirty-eighth day after, no part of the carcase was found, on the autopsy, to contain a single appreciable trace of arsenic. A dog to which the viscera were given to eat exhibited not the slightest sign of illness,

nor could arsenic be detected on analysis either of its fæces or urine; and six persons who partook of the muscular fibre as food lived on it for twelve days without feeling any inconvenience or symptom distinguishing it from meat of other descriptions. 2. The dog that ate the viscera of three poisoned sheep did not experience fatal results, and when killed on the ninth day from the reception of this food, exhibited a healthy internal appearance, without any trace of arsenic whatever, the entire poison having passed off in the urine during the six days immediately following the introduction of the poison into the system. The comparative harmlessness of the poison on the dog, as compared with the sheep, may be accounted for from the far smaller extent (about one-fifth) of the intestinal canal, as well as the much greater muscularity of the tissues connected with the digestive organs of the carnivorous animals: these causes render the digestion, absorption, and the secretions generally much more active in the dog than the sheep. The previous observations and experiments of MM. Danger and Flandin will be found at p. 838 of the last volume of THE LANCET.—*Gazette des Hôpitaux*, March 2.

IMPROVED TREATMENT OF HYDROCELE.

IT need scarcely be recalled to mind that in the operation for hydrocele, after the serum has been discharged through the canula of the trocar, it is usual to inject an irritating fluid in order to induce an adhesive inflammation in the parietes of the tunica vaginalis. The inflammation somewhat subsides after about the fifth day; but a month commonly elapses before the whole quantity of the injected fluid is absorbed and a cure effected. On this somewhat tedious course of practice M. Lisfranc has made the following improvement:—On the sixth day, after the use of a vinous injection, he makes a second puncture, for the purpose of emptying the tunica vaginalis of all the accumulated liquid, thus sparing nature the task of its absorption; and by these means he alleges that a cure can be completed in less than half the time occupied by the usual method.—*Bulletin de Thérapeutique.*

M. MALGAIGNE, in a short memoir lately published at Paris on the treatment of white swellings, announces them to be a species of subacute inflammation, seldom or never amounting to suppuration; and he recommends for their cure a complete and absolute state of rest for the limb, to be effected by means of bandages and inclined planes, so contrived as by slow degrees to restore it to its natural position, but wholly unaccompanied by either topical or internal medicines, which he looks upon as interfering with the course of nature.—*Journ. de Chirurgie.*

SPONTANEOUS DETACHMENT OF AN UTERINE POLYPUS.

A SINGULAR case of this nature is reported by M. Marchal, of Calvi, in Corsica. A woman, forty-eight years of age, had, for about three years, been subject to frequent and profuse uterine discharges, accompanied by pains in the loins and a sense of weight in the pelvis. Conjecturing the existence of an inflammatory engorgement of the uterus, the medical attendant ordered leeches to the hypogastrium, hip-baths, rest, &c. Being of an active turn, the patient neglected to fulfil the latter injunction, and one day, on lifting a heavy vessel of hot water for one of her baths, she felt a sudden sensation of an internal rupture, and passed, per vaginam, a body of a tissue like the uterine structure, to which it had been attached by a peduncle. Other cases of spontaneous separation of a polypus are on record, but in these instances the result had occurred from ulceration of the peduncle, and not as a consequence of a sudden effort, which, according to M. Marchal, renders the case unique.—*Bulletin de l'Acad. Royale*, March 15.

NEWS AND CORRESPONDENCE.

EGGS.—Sir: In THE LANCET of March 18, a correspondent, who signs himself "GALLUS," says, "The fact of unimpregnated fowls laying eggs is what I never heard of before." Nevertheless, I beg to inform him it is true that no connection with the male animal is at all necessary for the formation of the egg. A female chick, kept from the time of its birth perfectly isolated from all of its kind, has laid eggs, although such eggs will not propagate the species. Connection with the male bird is necessary for the fecundation, but not for the actual formation of the egg. It is also a well-known fact that eggs which have been fecundated decay much sooner than the others. Your obedient servant,

CHICK.

March 21, 1843.

The resolutions of the medical gentlemen of the county of Surrey, assembling in large numbers at Epsom, on the 24th March, came too late for further notice this week. The meeting resolved to petition Parliament against the granting of new charters to the existing colleges "until the whole subject of medical reform had been thoroughly investigated by a committee of the House of Commons." A committee of nine Surrey practitioners was appointed to watch the proceedings of the Legislature relating to changes in medical law.

The letters of *Mr. Barnsley* and *A Pupil of Dr. Lee*, came too late for notice this week. Many communications have been received from correspondents, which being intended for insertion, are not therefore here more specially acknowledged.